University of Alberta

Preparing for Breastfeeding: Mothers' Perspectives on Learning From Unsuccessful and Successful Experiences

by

Leslie Elaine Ayre-Jaschke ©

A thesis submitted to the Faculty of Graduate Studies and Research
in partial fulfillment of the requirements for the degree of Master of Science

Centre for Health Promotion Studies

Edmonton, Alberta

Fall 2004

Library and
Archives Canada

Published Heritage
Branch

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque et
Archives Canada

Direction du
Patrimoine de l'édition

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence
ISBN: 0-612-95703-9
Our file Notre référence
ISBN: 0-612-95703-9

The author has granted a non-exclusive license allowing the Library and Archives Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou aturement reproduits sans son autorisation.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

Canadä

Dedication

This thesis is dedicated to the memory of my mother, Agnes Ayre (1929 -1999), who gave me the gift of breastfeeding, and to my sons, Paul and Mark, without whom I would not have known the challenges or the joys of breastfeeding.

Acknowledgements

There are many people that I need to recognize at the end of this long journey. The women who agreed to participate in this study shared their stories of what breastfeeding meant to them, their struggles and disappointments, as well as their successes. I was sad to hear of the problems encountered, inspired by their willingness to try again, and enlightened by their perspectives about each breastfeeding experience. It was a privilege to be allowed to learn from them.

Also deserving recognition are the countless friends, family, and acquaintances who for the past five years had to endure hearing about my coursework and research. This social network—including the group of adult learners who met occasionally for breakfast, SEARCH faculty and colleagues, and thesis students who met online—greatly helped to reduce the isolation a distance student can experience and enriched my learning. The most important member of the network, however, is my husband. His patience, understanding and willingness to listen, as well as his help in keeping the home life functioning while I spent countless hours at the computer, was critical to completing the thesis and degree. Thanks so much, Eric.

And finally, I acknowledge the contribution of the members of my committee. They have been so very patient and understanding of the challenges facing a mature student working at a distance from the university. My advisors, Dr. Kaysi Eastlick Kushner and Dr. Kate Caelli, were a calming presence when things got overwhelming, provided valuable insights, and guided me towards improved writing and more objectivity. Committee members, Dr. Kim Raine and Dr. Christina Rinaldi, offered important perspectives from other academic disciplines. Thank you—it was a pleasure to work with each of you.

Table of Contents

Chapter 1: Introduction to the Study 1

Breastfeeding as a Health Promotion Issue 1

Breastfeeding Initiation and Duration in Canada and Alberta 4

Purpose and Significance of the Study 6

Personal Interest in the Research 7

Chapter 2: Review of the Literature 9

Defining Breastfeeding Success 10

Breastfeeding Duration 12

Effective Interventions 15

Gaps in Research 19

Chapter 3: Method and Procedures 20

Introduction 20

Study Design 20

Participant Selection 21

Instruments 23

Data Collection 23

Data Analysis 24

Credibility 26

Ethical Considerations 28

Benefits and Risks 30

Chapter 4: Results and Discussion 31

The Study Context 31

Participant Description 32

Describing Breastfeeding Success 33

  Successful Breastfeeding Experiences 34

  Unsuccessful Breastfeeding Experiences 38

Achieving a Successful Experience: Inhibitors and Contributors 43

  Prenatal Preparation 44

    Personal learning 44

    Prenatal education by physicians 46

    Prenatal classes/education 47

    Peer support 49

  Birth and Immediate Postpartum Care 52

  Postpartum Support from Professionals 64

  Family, Community and Peer Support 71

  Expectations and Experience 79

Chapter 5: Conclusions and Recommendations 90

Implications for Practice 91

  Preparing for Success: Breastfeeding Education and Support 91

  Using Theory to Develop Breastfeeding Interventions 96

  Implementing Initiatives to Improve Breastfeeding Outcomes 97

Implications for Future Research 98

  Defining Success. 98

  Effective Prenatal and Postpartum Education and Counselling 99

  Peer Support 99

Providing Breastfeeding Service in Small Centres 99
Study Limitations 99
Participant Selection 100
Study Context 101
Conclusion 101
References 104
Appendix A Search Terms and Results 117
Appendix B Recruitment Poster 119
Appendix C Interview Guide 120
Appendix D Focus Group Discussion Guide 124
Appendix E Background Questionnaire 127
Appendix F Interview Information Letter and Consent Form 130
Appendix G Group Interview (Focus Group) Information Letter and Consent Form... 133
Appendix H Document Information Letter and Consent Form 136
Appendix I Codes 139

Chapter 1: Introduction to the Study

The quest to find ways to improve breastfeeding outcomes is one that occupies researchers and practitioners alike. New mothers and fathers also find that they become engaged in the search for solutions to problems and ways to improve the breastfeeding experience for mother and baby. This thesis describes a qualitative exploration of breastfeeding success based on interviews and a focus group discussion with experienced breastfeeding mothers in two northern Alberta communities. The first chapter provides a background to the study and to breastfeeding as a health promotion issue, identifies the research question and its significance, and positions my interest in this research.

Breastfeeding as a Health Promotion Issue

Breastfeeding has been identified as key to improving the health of both children and mothers and to decreasing health care system illness costs. In a report published by the Pan American Health Organization (PAHO, a regional office of the World Health Organization) (León-Cava, Lutter, Ross, & Martin, 2002), evidence was assessed on the effects of breastfeeding on infant morbidity due to diarrhea, acute respiratory infections, otitis media and ear infections, and other infectious diseases; infant mortality due to diarrhea, acute respiratory infection, and all causes; intellectual and motor development; chronic disease development, in particular obesity, diabetes, and cancer; maternal health, with an emphasis on breast and ovarian cancers; and the economic impact of these conditions. The report's authors concluded that breastfeeding, particularly exclusive breastfeeding in the first six months, has an important impact on reducing illness and increasing infant survival, even in developed countries. There was a small but persistent impact of breastfeeding on a child's intellectual development. The authors stated that this has "plausible biological explanations" such as long-chain polyunsaturated fatty acids present in human milk as well as the "unique physical contact between mother and infant provided by breastfeeding [that] is thought to provide psychosocial stimulation and bonding that may have developmental benefits" (p. 3). In terms of chronic disease in later life, the authors suggest cautious interpretation due to the small number of studies but state that "reduction of chronic disease risk can be promoted as an additional potential benefit of breastfeeding" (p. 4). Maternal health is improved through reduced risk for premenopausal breast cancer and ovarian cancer. Finally, the economic impact is shown to be significant at the family level as well as societal level, in developed countries as well as those that are less developed. The PAHO website states that the summary of the evidence of breastfeeding's impact on health outcomes "makes a powerful case for protecting, promoting, and supporting a life-saving resource that ensures the best start in life for newborns" (2002).

At the economic level, Drane (1997) conservatively estimated that in Australia, using only four illnesses (necrotizing enterocolitis, gastrointestinal illness, eczema, and otitis media) and educational costs associated with neurodevelopmental impairment due to lowered IQ, a savings of at least $11.5 million could be realized with a 20% increase of exclusive breastfeeding prevalence of infants at three months of age (from 60% to 80%). In Canada, a recent study of First Nations people in Manitoba suggested that improved breastfeeding could influence the rising rates of Type 2 diabetes in Aboriginal, and perhaps non-Aboriginal, children and adults (Young, et al., 2002).

Many western countries have set targets for increased rates of breastfeeding initiation and duration, indicating that breastfeeding is being increasingly identified as a health issue. For example, the United States adopted the USA *Blueprint for Action on Breastfeeding* (Department of Health & Human Services, 2000), Australia developed *Health Throughout Life: National Breastfeeding Strategy* (Australian Commonwealth Department of Health and Aged Care, 2001) and in 2003, the United Kingdom National Health Service set a target of a 2% annual increase in breastfeeding initiation rate (National Health Service Department of Health, 2002).

The Canadian government has not established national goals for breastfeeding initiation or duration rates, but Health Canada policy (developed in cooperation with the Canadian Paediatric Society and the Dietitians of Canada) clearly supports breastfeeding with its recommendation of "exclusive breastfeeding for at least the first four months of life" with continuation "for up to 2 years of age and beyond"(Canadian Paediatric Society, Dietitians of Canada, & Health Canada, 1998). This policy is currently under review and will likely be revised to correspond with the World Health Organization recommendation (World Health Organization, 2001) of exclusive breastfeeding to six months, introduction of safe and appropriate complementary foods, and continued breastfeeding for up to two years of age or beyond. The Canadian government has also indicated its support of breastfeeding promotion by designating the Breastfeeding Committee for Canada as the national authority for the implementation of the WHO/UNICEF Baby-Friendly™ Hospital Initiative (BFHI) (Breastfeeding Committee for Canada, 1999). This international initiative is aimed at improving breastfeeding outcomes for mothers and babies through improvement in the quality of the care they receive while in hospital. In Canada, the initiative has been expanded to address care breastfeeding mothers and babies receive from community health services once they are discharged from hospital (Breastfeeding Committee for Canada, 2002).

Breastfeeding is a health behaviour that occurs within a complex social, cultural and political environment (Palmer, 1993). A health promotion approach that uses a variety of strategies, from individual to societal is therefore important to develop an environment where women are able to choose to breastfeed and then carry out their breastfeeding plans. The Canadian government has adopted a population-level perspective for promoting overall health (Health Canada, 2003b) that incorporates the philosophy and strategies of the Ottawa Charter for Health Promotion (World Health Organization, Health & Welfare Canada, & Canadian Public Health Association, 1986). This approach and the use of the five strategies (build healthy public policy, create supportive environments, strengthen community actions, develop personal skills, and reorient health services) provide a framework within which breastfeeding promotion, protection, and support activities can be developed. With evidence accumulating to show that an increase in breastfeeding duration could improve the health of children and their mothers while providing important cost savings to the Canadian health system, it is therefore a critical target for health promotion efforts.

Breastfeeding Initiation and Duration in Canada and Alberta

Canadian breastfeeding initiation rates have increased over the past ten years and breastfeeding is now widely promoted in Canada in the media, in government publications, and by health professionals. In 1998-99 the percentage of children under the age of two years who were reported by their mothers to have breastfed (regardless of duration) was 81.9%, compared with 78.5% in 1996-97 and 75.1% in 1994-95. In the

Prairie Provinces (defined by Statistics Canada as Manitoba, Saskatchewan, and Alberta combined), these rates were 86.2% (1994-95); 88.9% (1996-97); and 88.2% (1998-99) (Health Canada, 2003a). For the years 2000-01, of women who had given birth in the last five years, 80.4% initiated breastfeeding (89.4% in Alberta). For all of Canada, initiation varied among age groups, with a low of 74.8% among women aged 15-19 to a high of 84.3 in women aged 40-45.

In the former Mistahia Health Region in northern Alberta, where the interview portion of this study was conducted, initiation rates (defined as breastfeeding at discharge) for the aggregate period 1998-2000 were high, but below the provincial average of 85.4% (ranging between a high of 86.0% in 1998 to a low of 80.9% in 1999). In the former Peace Health Region, the context of the focus group portion of the study, initiation rates ranged from a low in 1998 of 67.3% to a high of 85.8% in 2000 (Alberta Health and Wellness, 2003).

As is common throughout the world, studies in Canada show that while women may intend to breastfeed, many do not continue past the early weeks. In Ontario, for instance, Sheehan, Krueger, Watt, Sword and Bridle (2001) found that initiation rates at study sites were high, ranging between 82% and 96%, but there was a rapid decline with between 13% and 24% of breastfeeding mothers switching to formula feeding by four weeks postpartum. Williams, Innis, Vogel, & Stephen (1999) found a high overall initiation rate of 82.9% in Vancouver (with notably significant differences between Caucasian and non-Caucasian mothers—91.6% compared with 56.8%). Despite the high initiation rate, only 18.2% of the mothers were still breastfeeding at nine months postpartum.

The National Longitudinal Study of Child & Youth (NLSCY) showed that the percentage of children less than two years of age whose mothers reported any breastfeeding for three months or more had stayed the same (63%) between 1996 and 1999 (Health Canada, 2003a). In the Prairie Provinces, there was a slight increase in numbers: 63.1% (1994-95); 64.1% (1996-97); and 65.9% (1998-97). Of the 80.4% of women who had given birth during the five years prior to 2000/01 and had initiated breastfeeding, 60.4% had breastfed for three months or longer. Younger women not only initiated breastfeeding in lower numbers, but also had much lower rates of continuation to three months or more: 38.9% in women aged 15-19, 51.3% in women aged 20-24, 58.0% in women aged 25-29, compared with 75.9% in women aged 40-45. In Alberta, the duration rate at three months or more was 68.3% among women who had completed breastfeeding. Duration rates may actually be higher since women who were still breastfeeding at the time of the survey were not included.

These numbers are encouraging but also indicate that health professionals need to learn more about the barriers confronting breastfeeding mothers and the types of interventions that are effective in helping mothers to begin to breastfeed, and to continue once begun.

Purpose and Significance of the Study

Breastfeeding is an extremely complex health behaviour that at the individual level involves a dyad engaged in a highly intimate dance, one that occurs many times throughout the day and night and that will last over months or years in order to achieve maximum health benefits for child and mother. The high percentage of mothers in Canada who now begin to breastfeed appears to indicate that the message that breastfeeding is important for the baby is well established. Current duration rates, however, belie the common perception that breastfeeding is easy because it is the natural way to feed and nurture an infant. It is not sufficient, or good practice, to promote breastfeeding without also ensuring there is effective education and support to help women to succeed. Health professionals therefore need to know more about what occurs between the intention to breastfeed, carrying out this intention and sustaining the behaviour once established. This study therefore explored the question "What do women identify as having contributed to or inhibited the achievement of a successful breastfeeding experience after one that they considered unsuccessful?"

Personal Interest in the Research

My interest in pursuing research in breastfeeding stems from a strong commitment to the importance of breastfeeding from a health perspective, but also from having observed how positively a successful breastfeeding experience can influence the relationship between mothers and their babies and how empowering it can be for women. A breastfeeding experience that does not go well can have the opposite impact, however, and I have listened to many women talk about their disappointment with the experience.

Breastfeeding has been an important part of my life for 25 years, as a breastfeeding mother, as a volunteer with La Leche League Canada, an organization whose mission it is to provide prospective and new mothers with information, education and support through group experiences and one-to-one help, and professionally as an International Board Certified Lactation Consultant (IBCLC) for eleven years. All of these experiences have led to a deep appreciation of the importance that women attach to the breastfeeding experience, the depth of emotion associated with both successful and unsuccessful breastfeeding experiences, and the individual, family, societal and health system barriers often encountered by breastfeeding mothers.

As a breastfeeding advocate, I am frustrated when I encounter programs or strategies that involve strenuous efforts to promote breastfeeding, but lack an accompanying emphasis on effective educational and supportive interventions. The rationale for this study and the qualitative design are the result of my seeking to better understand women's breastfeeding experiences—unsuccessful as well as successful—as a way to more effectively foster breastfeeding success.

Chapter 2: Review of the Literature

The literature on breastfeeding was reviewed to determine what was known about how mothers of healthy, full-term infants described breastfeeding success; to identify key factors known to influence breastfeeding duration; to determine what was known about effective interventions to increase breastfeeding duration; and finally, to determine the degree of use of health behaviour theory in the development of breastfeeding interventions.

The CINAHL and PubMed electronic databases were used to identify studies relevant to the four areas identified above. In addition, the Google Internet search engine was used to identify grey literature, such as policy statements, and to explore consumer websites. References from journal articles were followed up and hand searches were done in two lactation journals, the *Journal of Human Lactation* and *Breastfeeding Review*. Appendix A lists the keywords, phrases and search results. The abstracts for over 200 studies were retrieved. Key studies were retrieved and reviewed for applicability and approximately 60 were included in the review. A number of reviews were identified that synthesized evidence in the areas of breastfeeding duration and support interventions and were used to focus this review.

Following is the review of how breastfeeding was described in the literature by mothers, what is known about factors that influence breastfeeding duration, and what is known about effective breastfeeding interventions. Gaps in knowledge relevant to the research focus of this study are identified and discussed.

Defining Breastfeeding Success

A first step in the review was to determine what was known about defining breastfeeding success. Leff, Gagne and Jefferis (1994) noted that earlier literature reviews had found that researcher discipline tended to influence criteria identified for breastfeeding success. Health professionals tended to focus on a specific duration and infant growth, in the social sciences and lay literature more common indicators of success were maternal attitudes about breastfeeding experiences and the compatibility of breastfeeding with family life, while cultural breastfeeding studies emphasized the physiological and health benefits of breastfeeding. Despite a trend in more recent research to examine breastfeeding success from a broader perspective than these earlier studies, current policy recommendations on breastfeeding still tend to be based on outcomes for exclusivity and duration (for example, the recommendations from the World Health Organization and the Canadian Paediatric Society cited earlier).

Four studies were identified that specifically focussed on maternal perceptions of breastfeeding success. Beske and Garvis (1982) measured success by asking American mothers to answer yes or no to the question “Do you feel you have been successful in breast-feeding?” and “If you have another child, would you breastfeed again?” The study concluded that the women’s perceptions of themselves as successful breastfeeders was not influenced by the duration of the breastfeeding experience.

Leff, et al. (1994), asked 26 mothers in the New England area of the US to draw on their own experiences and what they knew of the breastfeeding experiences of friends and family, to describe successful and unsuccessful breastfeeding experiences and to rate their most recent breastfeeding experience. The study identified five components of maternal definitions of success: infant health, infant satisfaction, maternal enjoyment, attainment of desired maternal role, and lifestyle compatibility. Like Beske and Garvis (1982), this study found that duration was not a primary factor in maternal definitions of success, but that mother and baby "working in harmony" was a unifying theme based on the interrelations of the five components. The study found that mothers rated their breastfeeding success low when the infant was considered not satisfied. But when the infant was seen as satisfied, then maternal enjoyment, role attainment and lifestyle compatibility appeared to be important to how the mothers rated their experience.

Based on this study, the researchers developed the Maternal Breastfeeding Evaluation Scale (MBFES) (Leff, Jefferis, & Gagne, 1994) to measure breastfeeding satisfaction through questions in three broad areas: maternal role satisfaction, infant satisfaction, and lifestyle satisfaction. The scale was validated for clinical use by Riordan, Woodley, and Heaton (1994) in a US study that found the MBFES score was significantly correlated with the length of time women breastfed. Cooke, Sheehan and Schmeid (2003) used the MBFES in an Australian study to measure maternal satisfaction with breastfeeding over the first three months after the birth. A low MBFES score at two weeks (compared with medium or high scores) was predictive of greater likelihood of weaning at all survey periods (two weeks, six weeks, three months).

Hauck and Reinbold (1996) asked Australian mothers to classify their breastfeeding experiences as successful or unsuccessful and to identify the criteria by which they defined their experiences. The results indicated that breastfeeding success was a personally defined experience. Maternal enjoyment and satisfaction were the main criterion for judging success for participants with a successful experience as well as those who had both successful and unsuccessful experiences. Women with only unsuccessful experiences identified a duration goal, followed by infant enjoyment and satisfaction as important factors for success.

Another Australian study (Schmied & Barclay, 1999) found that breastfeeding was central to the participants' experience of motherhood and was an embodied experience that they found difficult to describe. Some participants identified a successful experience as feeling "connected, harmonious, and sensual" (p. 329). Others talked about having mixed feelings about breastfeeding, with a quarter of the participants describing it as a "disappointing and distressing experience" (p. 329).

These studies indicate that while policy-makers view successful breastfeeding outcomes in terms of exclusivity and duration, women appear to view a successful experience in terms of maternal and infant satisfaction and for some, lifestyle compatibility. This suggests that while breastfeeding is important to how women view themselves as mothers, the duration of breastfeeding is less important than the achievement of an overall harmonious caregiving relationship with their babies.

Breastfeeding Duration

Two reviews were identified that directly addressed factors contributing to breastfeeding duration. Scott & Binns (1999) reviewed English-language studies between January 1985 and December 1997 that used multivariate analysis to examine breastfeeding duration. The study determined that the factors that showed "clear and persistent impact" on duration included generally non-modifiable demographic factors such as maternal age and education (the older and the better educated the mother, the longer the duration), and potentially modifiable psychosocial factors such as paternal support, smoking habits, return to work, and the work environment. Biomedical factors such as parity, delivery experience and infant health that have shown previous strong associations in univariate analyses showed a weaker association with duration. Strong evidence was found for an association between the timing of the decision to breastfeed (the earlier the decision, the longer the duration) and the intended duration (women intending to breastfeed less than four months were more likely to have stopped at or before that time, compared with women who intended to continue for six months or more). The use of formula as hospital routine was negatively associated with duration when factors such as low birth weight were controlled for. The authors commented, however, "strong maternal commitment and a supportive hospital environment can overcome intervening events that contrive to make breastfeeding difficult" (p. 8). Early introduction of formula by the mother (within two weeks postpartum) was also associated with early cessation. The study showed that both paternal support and doula support in the first few weeks postpartum were associated with increased duration. Peer support, an increasingly recognized source of long-term support for new mothers (Dennis, Hodnett, Gallop, & Chalmers, 2002; Martens, 2002) was not discussed, perhaps because no high-quality, multivariate studies were identified.

Dennis (2002) reviewed randomized-controlled trials, meta-analyses, studies with large, representative populations, and North American investigations. Factors influencing breastfeeding continuation were categorized broadly into personal characteristics, attitudinal and intrapersonal characteristics, hospital policies and intrapartum experience, sources of support, and breastfeeding interventions. Under personal characteristics, consistent variables influencing initiation and duration were similar to those identified by

Scott and Binns (1999): maternal age, socioeconomic status, ethnicity, smoking status, and employment. Attitudinal characteristics identified as influencing duration were prenatal intentions (the earlier the decision to breastfeed the greater likelihood of longer duration; intended duration); maternal attitudes (positive attitude towards breastfeeding, positive thinking, self-perception of self as a problem-solver); and high maternal confidence. A number of hospital policies were assessed, including early breastfeeding initiation (impact on duration not clear), rooming-in (shown to influence duration), supplementary feedings in the first days after birth (associated with increased risk of breastfeeding failure), hospital discharge packs containing formula (uncertain impact on duration, likely more significant for women with uncertain or short-term breastfeeding goals), early hospital discharge (effect unknown), and the intrapartum experience (birth experience influence on duration uncertain, continuous support during labour appeared to influence duration). Studies on sources of support were grouped into informal and formal, with the conclusion that women are more likely to continue breastfeeding if members of their support network are supportive of the decision to breastfeed or have breastfed themselves. For those women with paternal or nonprofessional support, there was an increased chance of "positive breastfeeding behaviors" (p. 12), which could reasonably be considered to increase duration.

The review found that the influence of formal support on duration was shown to be inconsistent, although breastfeeding information during prenatal classes and early postpartum education may influence duration. Health care providers were identified as potential sources of negative support due to lack of confidence, training or knowledge.

Breastfeeding interventions were grouped as professional support or lay support and assessed as to their influence on breastfeeding duration (discussed in following section).

In summary, these reviews concluded that factors that are generally non-modifiable, such as maternal age and education, as well as modifiable factors such as maternal confidence and degree of support, particularly from informal sources, influence breastfeeding duration. Factors showing uncertain influence were parity and the birth experience. Early formula supplementation, either in hospital or within the first two weeks, was identified as a risk factor for early cessation.

Effective Interventions

The literature was reviewed to determine what kind of interventions to support breastfeeding had been found to be effective. Raj and Plichta (1998) concluded from a review of literature on social support and breastfeeding that support from both informal social network members, identified as including the male partner, mother, family and friends, and professional network members, identified as including health care professionals and lactation consultants, enhanced breastfeeding duration. A Cochrane review (Sikorski, Renfrew, Pindoria, & Wade, 2002), an update of one included in Dennis's review cited above, examined breastfeeding support interventions offered in the postnatal period alone or that also included a prenatal component and that were designed to facilitate continued breastfeeding. Interventions were excluded if they were offered only in the antenatal period, as were interventions that were solely educational. The main outcome measured was the impact of the intervention on breastfeeding duration, evaluated at seven time periods (before four to six weeks, and at 2, 3, 4, 6, 9, and 12 months). The results gave clear evidence that professional support can influence duration to two months (but not at six months) and the review concluded that consideration needs to be given to providing breastfeeding support as part of routine health services. The review also concluded that interventions using nonprofessional (lay) support are effective in promoting exclusive breastfeeding but that effect on duration is uncertain. The Canadian Task Force on Preventive Health Care (Palda, Guise, & Wathen, 2003) identified two effective interventions that promote breastfeeding duration: structured antepartum educational programs and postpartum support and peer counselling.

Since the use of common health behaviour theories may enhance the effectiveness of breastfeeding interventions, the literature was reviewed to determine the degree of use of health behaviour theories in breastfeeding research. Ajzen and Fishbein's Theory of Planned Behaviour (TPB) (Montano & Kasprzyk, 2002) has been used by a number of researchers to study breastfeeding, in particular the relationship of the theory's constructs and duration. Coreil and Murphy (1988) used the TPB to measure prenatal duration intention versus actual duration and confirmed that prenatal intention was the strongest predictor of duration. The study also identified that despite prenatal intention there was an independent negative effect with respect to formula supplementation and that the effect was inversely related to the mother's social support. Janke (1994) developed and tested the Breast-feeding Attrition Prediction Tool (BAPT) and was able to accurately predict 73% of women in the study population who weaned prematurely. The validity of a shorter version of the tool has been confirmed (Dick, et al., 2002). Wambach (1997) found the TPB identified a weak association between breastfeeding intention and duration up to six weeks postpartum but in considering practice implications suggested that interventions be considered with pregnant women to increase positive attitudes as well as feelings of confidence and control. Avery, Duckett, Dodgson, Savik and Henly (1998) developed a TPB model that included breastfeeding-specific variables and found it could identify with reasonable accuracy those women at risk for early weaning. The researchers suggested that screening and individualized provision of service could lead to increased breastfeeding duration.

Martens and Young (1997) developed a revised Azjen and Fishbein Theory of Reasoned Action (TRA) model by adding a construct from the Social Cognitive Theory—confidence (self-efficacy)—to the TRA constructs "belief" and "referent support." A further construct—satisfaction—was not included in the model but was tested. Outcome measures included breastfeeding choice and duration. The model was tested in a Manitoba First Nations community, and showed that the best predictors of choice were prenatal intent and breastfeeding confidence. The best predictors of duration were satisfaction with breastfeeding at two weeks and referent support. The authors concluded that the model may be useful in conducting community needs assessments prior to program development. As well, they suggested that programs be developed to enhance prepartum breastfeeding confidence, and that a quick assessment of satisfaction and breastfeeding problems at two weeks could be used to identify women at risk for early weaning.

Further studies have used Social Cognitive Theory constructs, in particular self-efficacy. McCarter-Spaulding and Kearney (2001) tested the Perception of Insufficient Milk (PIM) questionnaire to investigate the relationship between parenting self-efficacy and perceived insufficient milk supply. Perceived insufficient milk supply is one of the most common reasons given by women in Canada and elsewhere for discontinuing breastfeeding (Maclean & Millar, 1999). A moderate correlation was found between parenting self-efficacy and the perception of insufficient milk supply, suggesting that, "mothers who perceive that they have the skills and competence to parent a young infant also perceive that they have an adequate breast milk supply" (p. 519). Dennis and Faux's Breastfeeding Self-Efficacy Scale (BSES) (1999) has been validated in Canada as well as in other settings and languages (Blyth, et al., 2002; Dai & Dennis, 2003; Torres, Torres, Rodriguez, & Dennis, 2003) as being able to identify new mothers who are at high risk to prematurely discontinue breastfeeding due to low breastfeeding confidence.

Only one study (Tiedje, et al., 2002) was identified that called specifically for a broad-based approach to planning and implementing breastfeeding interventions identified with a health promotion approach. The study's recommendations included a call for interventions that consider contextual factors that may influence breastfeeding duration and that are provided at levels including and beyond the individual level. Two Canadian interventions (Hogan, 2001; Martens, 2002) were designed using a community development approach that integrated aspects of a broad-based approach.

Research on effective breastfeeding interventions has identified the provision of support as a factor in increasing breastfeeding duration. Two health behaviour theories have been shown to be effective in identifying women at risk for early breastfeeding cessation and may thus provide guidance for the development of effective interventions, particularly in the areas of building individual coping skills and increasing maternal confidence. There was little research identified on interventions that incorporate a broad-based health promotion perspective in planning and implementation.

Gaps in Research

While there has been extensive, largely quantitative, research over the past 20 years on factors influencing breastfeeding duration, an increase in duration rates has not resulted from this increased knowledge. More recent research, particularly qualitative research as well as research incorporating health behaviour theory, has begun to examine breastfeeding success and duration with greater depth and specificity.

The literature review revealed that there is still much to be learned from breastfeeding women themselves with respect to individual, community, and cultural factors associated with breastfeeding duration, and about the kinds of support they identify needing. Many of the studies reviewed included only first-time mothers, who have no other experience with which to compare. While a number of studies were identified that examined the concept of breastfeeding success and included the perspectives of women who had successful and unsuccessful experiences, all were conducted in urban areas outside Canada. This study, with the purpose of exploring what women in a northern Alberta context identify as contributing to a successful breastfeeding experience after one that they considered unsuccessful, therefore provides a way of addressing these gaps in knowledge.

Chapter 3: Method and Procedures

Introduction

This chapter outlines the methods used to carry out this qualitative study, which was designed to obtain in-depth descriptions of the factors that study participants identified as inhibiting or contributing to breastfeeding success.

Study Design

The qualitative approach was chosen to obtain "depth and detail" (Patton, 2002, p. 14) about the issue under consideration—the unsuccessful and successful breastfeeding experiences of women living in northern Alberta. In addition, the qualitative approach was consistent with my desire to obtain a holistic view of the breastfeeding experience for these women, to conduct the research in a natural setting, and to have a study design that was emergent and interpretive (Marshall & Rossman, 1999).

Qualitative research approaches are also consistent with the health promotion perspective brought to this study. Health promotion research draws from a number of different disciplinary traditions, including psychology, medicine, nursing, epidemiology, sociology, anthropology and education. While these different approaches bring vitality to health promotion research, they can also create confusion about appropriate qualitative methodological approaches (Tones, 2000). Noncategorical interpretive description (Thorne, Kirkham, & MacDonald-Emes, 1997), rather than a more traditional approach such as ethnography or phenomenology, was selected for this study because it offered the opportunity to address the overall objectives of this study, to take an interdisciplinary perspective, and to bring an applied perspective to the research.

The design of this study used systematic approaches for participant recruitment, interviewing, and data analysis, consistent with the requirements outlined by Thorne, et al. (1997) for trustworthy qualitative research. These authors argue that rather than adhering to traditional qualitative inquiry methods, what is critical is "coherent logic within the analytic framework and a traceable audit trail for the inductive reasoning process" (p. 172).

Data triangulation (Patton, 2002) was built into the design by the collection of three sources of data from two communities: (1) One-to-one interviews (one interview per participant), which provided the opportunity to learn from the women without directly observing them and to give voice to their stories (Patton, 2002); (2) a focus group, which offered the opportunity to generate high quality data within a social context, where participants could hear others' views and consider their own, and where I could ask participants to reflect on findings from the interviews (Patton, 2002); and (3) documents such as baby book or journal entries, which could provide a further view into the experiences of breastfeeding mothers.

Participant Selection

I sought in-depth accounts about the experiences of a small number of mothers. The sample size was determined by pragmatic considerations such as time, distance, researcher experience and resources as well as in consideration of the potential for information rich cases. Patton (2002) argues that these, combined with the observational and analytical skills of the researcher, have as much to do with "[t]he validity, meaningfulness, and insights generated from qualitative inquiry. . . [as] with sample size" (p. 245).

Interview participants were recruited in a northern Alberta city using a variety of strategies. Posters (Appendix B) were placed in the public health office and other strategic locations such as physician offices, a supermarket, and child care facilities. I spoke with the public health nursing manager in the city, who took a poster to a staff meeting to promote the project. Contact was made with one of the local La Leche League Leaders to bring the project to her attention. Two days of advertisements and an article in the local paper proved most helpful in generating participation, although some participants mentioned they had seen the posters and then called after the newspaper article appeared. One woman kept the poster information until she felt she was having a successful experience with her newborn. Seven participants were recruited who met the study criteria, being over 18 years of age, English-speaking, and having had what they described as unsuccessful and then successful breastfeeding experiences with full-term infants born since 1993. This time frame was broadened, with ethics approval, from experiences since 1997, when initial recruitment proved difficult.

While recruiting participants, I was also contacted by two women who had had experiences that were the opposite of the recruitment criterion, with their first breastfeeding experiences being successful and then their second ones unsuccessful. I realized that adding these women's experiences to the study could enrich the data, so following approval from my advisors, ethics approval to include these women in the study was obtained.

Recruitment strategies similar to those used for the one-to-one interviews (posters, newspaper ads and articles, word of mouth) were used for the focus group, but were initially unsuccessful. Subsequently, personal contacts were used to recruit two women willing to participate in a focus group discussion.

Instruments

The interviews used a combination of a conversational strategy and a semi-structured qualitative interview guide (Appendix C) (Patton, 2002). This combination helped to minimize variation between interviews while also allowing for flexibility that permitted the women to tell their stories, and provided the opportunity for probing questions to be used if new areas arose that needed further explication.

The interview guide was pilot-tested with one woman. While no revisions were made at that time, small revisions were made as the interviews progressed, with the most significant addition being a question that asked the participants to describe, in their own words, "successful" and "unsuccessful" breastfeeding experiences. The literature review and interview data analysis were then used to develop the questions and probes for the focus group interview guide (Appendix D).

Data Collection

Data collection was conducted carefully and systematically. Following the completion of each one-to-one interview, field notes were written to summarize the interaction, describe the interview setting, participant body language, etc. The tapes from these interviews, the focus group, and field notes were transcribed verbatim, resulting in textual data. Information from the screening questionnaire (Appendix E) was compiled into tables. Participants were asked to provide copies of documents, such as baby book or journal entries that might add to an understanding of their experiences; no data of this type were provided.

Participants were mailed the information letter and consent form (Appendices F and G) or it was provided in person after they had contacted me. Interviews were arranged for a time and location that was convenient for each participant and reimbursement for childcare expenses was offered; none of these women requested reimbursement. At the interview, the study and consent were reviewed and signed and a copy of each was given to the participant. Participants were informed that participation was voluntary and they could refuse to answer any question, request that the tape recorder be turned off, or withdraw from the interview without consequence. The option of turning off the tape recorder was not offered to the focus group. With just two participants in the focus group, the study design, which provided for a note-taker, was unnecessary and possibly intrusive, so permission was obtained from my advisors and the participants to tape record the discussion instead. Verbal confirmation of consent was obtained at the end of the interviews and participants were asked whether they could be contacted again for follow-up questions.

The one-to-one interviews lasted between 45 and 60 minutes each, and the group interview lasted about 90 minutes. During interviews, care was taken to create a safe environment and to give participants the opportunity to debrief afterwards, should they wish. Focus group participants were asked to respect the confidentiality of the discussion.

Data Analysis

Steps taken to ensure that data analysis was thorough and followed common qualitative procedures are described below. A short summary report was written for each one-to-one interview participant (excluding the pilot interview) prior to the start of coding as a means of understanding the story presented by each participant. Tables were created to summarize the demographic and experience data of each participant and provide an overview of their information.

Data were cleaned prior to beginning analysis of the transcripts to ensure that the transcripts were consistent with the tapes. As I listened to each tape I followed the transcript, correcting errors, and inserting text that the transcriptionist had been unable to discern. Listening to the tapes again in this way proved informative as it refreshed my memory of the participants' tone of voice and nuances of expressions during the interviews.

ATLAS.ti® v. 5.0, a qualitative research software program, was used to manage the data—interview transcripts, field notes, and memos—and to facilitate analysis. Documents were read and coding was developed inductively using the women's own words (*in vivo* coding) as well as "theory-derived sensitizing concepts" (Patton, 2002) that had been identified during the literature review (e.g., confidence/self-efficacy, social support, adjustment to motherhood, perception of milk supply). These informed the initial coding but I remained open to findings that did not fit within these concepts.

Once all documents were coded, the code names were reviewed for clarity. Some codes were combined because they were similar in content. The final coding list was developed and guided a final document re-reading and re-coding. This coding process resulted in 43 codes related to the unsuccessful breastfeeding experience, 40 related to the successful experience and 13 codes not relating specifically to either experience. Two new codes were added during the analysis of the focus group interview. The final list of codes is in Appendix I.

Once coding was complete, codes and quotations were combined using data display strategies such as matrices and visual mapping (Miles & Huberman, 1994) and were examined from different perspectives. For example, quotations were placed side-by-side in a table for each participant's description of a successful breastfeeding experience and an unsuccessful experience. This provided an efficient view of the data that made it easier to critically read the descriptions and make cross-case comparisons. *Mind Genius*, a software program for "mind-mapping" was used to help organize thinking and to generate visual representations of the coded data. To preserve the chronology of the analysis process, memos were written throughout the process, the project (called a "hermeneutic unit" in *Atlast.ti®*) was saved regularly under a new name, and HTML versions were created. The software ensured that quotations were not taken out of context, making it easy to return and read surrounding text.

As the analysis proceeded, relevant literature was consulted, new literature considered, and regular discussions were held with thesis advisors by e-mail and telephone. In addition, a trainer was engaged to learn to use *Atlas.ti®* effectively. The trainer had no background knowledge in the health or lactation field and was therefore able to provide a fresh view of analysis strategies. The results from the one-to-one interview analysis provided the basis for the focus group interview guide. Once the focus group interview was transcribed, it was imported into *Atlas.ti®* and coded.

Credibility

Patton (2002) suggests that constructivist and social construction research quality and credibility can be judged by a number of criteria: acknowledgement of subjectivity; trustworthiness; authenticity; triangulation; reflexivity; praxis; particularity; *Verstehen* (enhanced and deepened understanding); and how the work contributes to dialogue (p. 544).

The procedures established for data collection and analysis as well as my training, experience and openness about my perspectives are offered as evidence of credibility. Following is a discussion of each of the above criteria for credibility.

I acknowledge the subjective nature of this project as being critical to this kind of inquiry. Trustworthiness and authenticity are evidenced by the "balanced, fair, and conscientious" (Patton, 2002, p. 575) presentation of results in Chapter 4, where the perspectives of each participant are honoured and respected. My thesis supervisors read the interview and focus group transcripts and were able to confirm that identified results were consistent with the data. Triangulation of data and perspectives was achieved through collection in different forms and in different locations.

Reflexivity is the process of undertaking "an ongoing examination of *what I know* and *how I know it*" (Patton, 2002, p. 64) as well as asking questions about the participants being studied. For example, "how do [they] know what they know? . . . how do they perceive me, the inquirer?" (Patton, 2002, p. 494). In being reflexive, I worked to be "attentive to and conscious of the cultural, political, social, linguistic, and ideological origins of [my] perspective and voice as well as the perspective and voices of those [I] interview[ed]" (Patton, 2002, p. 65). The focus group provided an additional way to be reflexive, since the women reflected on what I thought I had heard and offered feedback on these perspectives. Some of their feedback, as well as what I heard in the field, confirmed previous knowledge and assumptions, but also forced me to re-evaluate assumptions and reconsider perspectives. This reflexivity was crucial, given my long history and commitment to breastfeeding at personal, volunteer, and professional levels.

Praxis is the connection of theory to action, and Chapter 5 includes a call to action for health practitioners to learn how to more effectively support women and help them to have successful breastfeeding experiences. The particularity of cases is presented and accounted for in the analysis. No claim is made that the results of this study are generalizable to other contexts; readers of the study may make their own decisions on applicability to their context.

Verstehen is enhanced and deepened understanding. This study enhances and deepens what is already known about breastfeeding by exploring the experience of women in northern Alberta who have had unsuccessful and successful experiences. In terms of this work contributing to dialogue, plans for dissemination of research results include distribution of the executive summary to all participants, women who contacted me to participate but did not meet study criteria, and key decision-makers within the health region. As well, I will pursue publication, submit applications for oral or poster presentations at conferences, and offer presentations to physicians, nurses, and parent groups in the health region where the study took place. Through these efforts, I hope that this work will contribute to a continuing dialogue among women, their families and friends, health practitioners, and policy makers.

Ethical Considerations

Ethics approval for the study was obtained from the Health Research Ethics Board Panel B, of the University of Alberta (Edmonton). As discussed earlier, further approval was received to broaden the timeframe for the study and to interview the two participants who did not meet the study criteria as it was originally approved.

Interview participants voluntarily contacted the researcher by phone or e-mail if they were interested in participating in the study. For the pilot interview and the focus group, women were invited to participate, ensuring that they understood that participation was completely voluntary. The study was explained verbally to all potential participants and permission was sought to ask screening questions. The information obtained during screening was retained for all participants but non-participant information was not included in analysis or background description. For the women who expressed interest but did not meet study criteria, a summary of the completed study results was offered.

Before the interviews and focus group began, the consent letter was reviewed briefly and initialed by the participants and me and permission to tape record was again confirmed. At the conclusion of each of the interviews and focus group, participants were requested to verbally reaffirm their willingness to have their comments included in the study.

The transcription service did not receive personally identifiable information about the participants and was asked to maintain confidentiality about the content of interviews. Participants were given an alias and descriptors were used sparingly in writing up the results in order to disguise identities. Tapes, documents from participants, transcriptions, field notes, and researcher journals are stored in a locked location. Electronic data is stored on a password-protected computer or on other media that is in a locked location. Data will be retained for a period of five years, after which time they will be destroyed.

Benefits and Risks

The information letter informed participants that they might benefit from involvement in the study by having an opportunity to share their personal experiences with an interested party and by contributing to the knowledge about how women prepare to have a successful breastfeeding experience. By being involved in the study, the participants may have increased knowledge about themselves or their situations either through the opportunity for introspection or through direct interaction with the investigator. All participants appeared to enjoy speaking about their experiences with a nonjudgmental investigator.

Participants were not exposed to experiences that resulted in direct or indirect harm, although there was a small risk that discussing past experiences might be emotionally distressing. As noted in the section on data collection, care was taken to create a safe environment for the interviews and focus group and I gave participants my phone number so they could contact me if they wished to further discuss their situation or the interview. There was some risk that the participants might feel inconvenienced in that there was a commitment of time away from usual activities, but to minimize this, the interviews and the focus group were booked at a time and in a location that was convenient for the participants. Some participants were interviewed in their homes, one was interviewed in a public but quiet place, and another in a hotel room.

Chapter 4: Results and Discussion

As described in Chapter 1, this study explored the factors that breastfeeding mothers in northern Alberta identified as having contributed to or inhibited their achievement of a successful breastfeeding experience after one they considered unsuccessful. With the inclusion of women whose experience was the opposite (successful and then unsuccessful), a broader perspective was obtained on success and the conditions that contribute to women's breastfeeding experiences.

This chapter presents the study findings, including the context of the study, a description of the participants, participants' descriptions of both successful and unsuccessful breastfeeding experiences, and descriptions of the factors that participants identified as contributing to or inhibiting breastfeeding success.

The Study Context

During the time that participants in the study were pregnant and breastfeeding (between 1993 and 2003), there were two health regions in the geographic area covered by the study. The larger community had a population of approximately 40,000 at the time the interviews were conducted. Approximately 1200 births per year occurred at the regional health care facility, and obstetric and pediatric specialists were available in the community. The second study site had a population under 7000 and had a single health centre that housed all health services, including acute care and public health services, with approximately 200 births a year. Obstetric and pediatric specialists are not available in the community on a regular basis. Neither acute care facility nor public health service had a staff lactation consultant between 1993 and 2003.

Community lactation support was also limited during this time period. The closest breastfeeding clinic was 500 kilometres away. Breastfeeding preparation classes were not available in either community. In the larger community there was a certified lactation consultant available on a fee-for-service basis for a portion of time between 1993 and 2003. Until 1999, I provided lactation services in private practice and through a Canada Prenatal Nutrition Program with occasional clients from the larger community, and the majority from the smaller community. In both communities, La Leche League Canada accredited volunteer leaders held monthly group meetings and provided telephone support. Prenatal classes provided by a nonprofit childbirth association were available during this time in both communities. A mother's drop-in group, facilitated by health professionals, was available during some time periods in both communities.

Participant Description

A total of nine women, all Caucasian and born in Canada, were interviewed in the two communities. Seven women were interviewed one-to-one and two participated in a focus group. Seven of the nine participants had an unsuccessful experience followed by a successful experience; two had a successful first experience followed by one that was unsuccessful.

Seven of the women had two children; two had three children. The gender of the children appeared irrelevant to breastfeeding success, with the number of males and females almost equal between unsuccessful and successful cases. All participants except one were married, and the unmarried participant was in a relationship with the father of both her children at the time of the first birth. The participants' ages ranged from 20 to 34 years at the time of their first births, and ranged between 22 to 40 years by their last birth.

The women were well educated; all had completed high school and all but two had post-secondary education, which ranged from a 2-year diploma to a Master's degree.

During the first pregnancy, eight of the nine women attended prenatal classes (seven in northern Alberta communities; one in a southern urban centre). None of the participants attended prenatal classes with their last pregnancy, although the two women with three children attended refresher classes with their second pregnancy.

Seventeen of the 19 babies were born to study participants during 1993 or later in northern Alberta hospitals. Two participants gave birth to their first child in larger urban centres prior to moving to northern Alberta. Physicians attended all births. All first babies were born vaginally, full-term (37 weeks gestation or greater) and healthy. Of the second and third births, four of the nine were by caesarean delivery. All were born full-term and healthy, although two infants delivered by emergency caesarean spent a short time in the special care nursery before discharge from hospital.

The study participants had breastfeeding experiences that lasted between 3 days and 33 months. Of the successful experiences, the range was between 10 weeks (and still breastfeeding but beginning to wean) and 33 months. Several of the women were still breastfeeding at the time of the interviews. Of the unsuccessful experiences, the range of duration was between three days and nine months.

Describing Breastfeeding Success

When recruiting participants, the terms "successful breastfeeding experience" and "unsuccessful breastfeeding experience" were used. The terms were not defined, which enabled women to decide for themselves how they would characterize their experiences.

The women were asked to describe successful and unsuccessful breastfeeding in general and then specifically related to their own experiences. Each of the women was able to compare at least one unsuccessful and one successful experience. They appeared eager to talk about what breastfeeding meant to them, how important it was to have a successful experience, and how the unsuccessful experiences felt to them.

Successful Breastfeeding Experiences

When the women in the study contrasted their successful breastfeeding experiences with the unsuccessful ones, they spoke primarily in terms of their satisfaction and of their perception of their baby's satisfaction. Their satisfaction was sometimes linked with achieving personal goals. The women also identified feeling supported as a critical aspect of breastfeeding success. They spoke of the "bonding," "intimacy," feeling "content," or "feel[ing] closer to the baby. " And they described satisfied babies who were content and gaining weight.

The women whose last breastfeeding experience was successful spoke about it with a sense of pride and accomplishment, of gratitude, even of awe at what they had achieved. Bonnie's comments were representative of how others spoke of their successful experiences when she talked about just how important breastfeeding had been to her, "important enough that I persisted [until I was successful]" and how much it meant to her to have a successful breastfeeding experience after two unsuccessful ones. She marvelled that "I managed to breastfeed! Like, I managed to nurse one child!" and described it as being "high on the list" of her lifetime accomplishments. When asked about what surprised her about the successful experience, she said:

> I think the surprise was that it could be so… enjoyable . . . You know, the first experience was so, so lousy, and when it came to the third one, I just loved…you know, I didn't mind getting up in the night at all, or you know, that first morning nursing time and no one else was awake, it was really . . . I didn't know that I could feel that content, almost? . . . But . . . the bonding experience with my third one was just so different because of the nursing experience. And, so that was a surprise . . . a joy, it was just a joy … [I]t was just an incredible feeling of satisfaction, the fact that I, I did this, I just, you know, it was total success . . . and I enjoyed it so much, and I nursed until basically she didn't want to anymore, we went for [over two years] and I would have gone longer. I just, it was just such a thrill, you know, that it had finally worked, and, I, there was just a different, I mean, you're bonded to your [other] children, but it was just different the third time around . . .

Although Fiona had not been sure whether or not to describe her second experience as successful because she had supplemented with formula throughout, she did decide that for her, it was successful. She described how satisfying breastfeeding was for her compared with her first experience:

> When I nursed her, it was a relaxing, bonding, it wasn't, you know, all uptight, um, and she was a more content baby, either because of me, or in spite of me, or whatever, she was more content, she was easier-going, and um, it was, it was successful. I enjoyed nursing her. I looked forward to her waking up in the middle of the night-time… I looked forward to hearing my girl cry, you know. "Oh,

> good, there's no one around, and it's quiet," and [I] didn't mind one bit missing the sleep. [The experience] was night and day [from the first one].

Sarah described how satisfying and personally gratifying her first breastfeeding experience was and how her son benefited. Sarah spoke of the "really intimate relationship" and how she "thrived off of it." She found that breastfeeding her son was "just really easy," that the baby was "really content," and that she "really enjoyed it." Breastfeeding "gave me a sense of purpose and it gave me an escape from all of the other stuff that I was dealing with."

Brenda said she was "glad that I decided to nurse again and didn't allow my first experience to taint this one!" She described the successful experience first in terms of what she was doing for her son, but also noted aspects that she appreciated:

> It's not—it's not my be-all, end-all. I mean, I enjoy it for him but I'm not one of these mums—I'm not an earthy mum I guess, you know . . . I don't get the, the warm fuzzies from it. It's more of a convenience thing. . . and I like it, you know, bringing him in my bed and latching him on and both of us fall sleep together.

Elaine described mother and baby satisfaction when she said that breastfeeding success was "where both baby and mother are feeling more content after each [feeding] . . . and if both mother and baby are enjoying the time together." For Debbie, success was mostly linked to infant satisfaction, describing a successful experience as one where the "baby's happy and satisfied," but also where the mother feels like she is "satisfying him. . . you know and that it's making him happy." The maternal satisfaction was related to "feeling like your baby is well *because* of the breastfeeding." Gwen also talked about mutual satisfaction, describing breastfeeding success as where

> the experience can be enjoyable to the mother *and* the child, and that the child flourish[es] nutritionally, you know, like [the baby] get[s] enough milk and that … And that, just that it could be as beneficial to both the mother and the—and the child.

For several mothers, reaching maternal goals was an important indicator of breastfeeding success. Brenda, whose first breastfeeding experience ended 10 days after her baby's birth, described success as where: "You reach the goals that you wanted to reach with your baby." She was the only study participant who identified a specific length of time she planned to breastfeed (about six weeks). Barbara breastfed her first baby for nine months, six of which were with intense pain from sore nipples. Her focus for success was on maternal satisfaction when she described a successful breastfeeding experience as "One [where] you have little—little pain, little problem [so] that you can really enjoy your baby." Fiona described success both from the mother's perspective, as "one where the mother feels good about it," and also talked about reaching goals, recognizing the need to be "flexible or realistic, [and] working within the constraints that you've got."

Sarah, whose first breastfeeding experience was successful, described success in terms of maternal goals and seeking support to reach those goals: "Setting a goal and working towards it, and when you hit curves or you need support, going out and getting what you need, so that you can reach your goal." Bonnie also associated support with a successful experience, describing it as one "where the mum feels like she has the support she needs, when she needs it."

These women primarily linked breastfeeding success, then, with maternal and infant satisfaction. Goal attainment and the degree of support available and received were also critical to the descriptions of success.

Unsuccessful Breastfeeding Experiences

When the women in the study talked about unsuccessful breastfeeding experiences, they described a sense of disharmony caused by maternal or infant dissatisfaction. Debbie described an unsuccessful experience as one where "the baby is dissatisfied by your milk." Elaine described it in terms of infant dissatisfaction and how that affects the mother, where the baby "seems to become consistently more discontent after an attempted feeding and mother becomes increasingly frustrated." She noted that infant weight was a major factor for how she viewed success with breastfeeding.

Sarah's second baby had exceptional weight gain, but she stopped breastfeeding at around four months as a result the baby's crying and discomfort and her dissatisfaction caused by worry and stress over the frequent feedings and infant distress. This is in contrast to her first experience, when she continued to breastfeed for two years because it was "working so well." Fiona's unsuccessful experience also involved infant satisfaction linked with her own dissatisfaction related to what she described as almost constant feedings coupled with infant crying and poor weight gain. She commented that the unsuccessful breastfeeding experience put a "strain on every relationship I was in, not just me and the baby."

Some of the women described how their expectations for breastfeeding were not met. Brenda described how the experience was "supposed to be beautiful" but wasn't, and how it "didn't feel natural" and was "awful." Others talked about how breastfeeding was not enjoyable for them, how there was "no satisfaction," how frustrating it was, or how "overwhelmed" they felt. Words such as "horrible" and "lousy" were used to describe the unsuccessful experience. The sense of unmet expectations is consistent with the results of a study by Mozingo, Davis, Droppleman and Merideth (2000) who investigated the experience of American women who stopped breastfeeding within the first two weeks. The researchers described the "clash or incongruity between [the women's] highly idealized expectations and early breastfeeding problems" (p. 120).

Several women talked of the frustration with "trying everything" or about how despite all their efforts, it was just "not working." Gwen, whose second baby lost weight despite intensive efforts to turn the situation around, described dissatisfaction and an unsuccessful experience in terms of the amount of effort expended towards achieving success:

> Oh, unsuccessful I think is if after you try, you know . . . all the things that are suggested to you and I think you should look into different, various help, you know, whatever it is in your community—'cause, I mean, every community has some access to some help, once you try some things if it really—where your baby isn't—isn't doing well or you just really aren't doing well with the situation, then I would call that a negative experience.

Although Barbara breastfed her first baby for nine months, she termed the experience unsuccessful because of the energy it took to continue and to seek solutions to the problems she encountered. For her, an unsuccessful experience was one that was "negative in any way."

The women in the study expressed a range of emotions, from disappointment to devastation, about how they felt when their unsuccessful breastfeeding experience did not meet their expectations. Fiona spoke for others when she summed up the unsuccessful experience this way:

> We tried everything for a month, you know, and it just didn't work. And so I felt frustrated, a failure, disappointed, the whole nine yards. I was just devastated, basically, that it didn't work.

These feelings expressed by Fiona are similar to how women talked about unsuccessful breastfeeding experiences in other studies. Dykes & Williams (1999) examined perceived milk insufficiency with a group of first-time mothers in the United Kingdom. For the women whose experiences were unsuccessful, breastfeeding was a "challenging journey," where they felt they had "fallen by the wayside" (p. 232). In Mozingo, et al. (2000), women who stopped breastfeeding within two weeks talked about how breastfeeding didn't work for them and expressed feelings of failure, guilt, disappointment, shame or self-doubt, and anger over stopping before they had intended.

As with the identification of support as a factor associated with breastfeeding success, the women identified a lack of support as being associated with the unsuccessful breastfeeding experience. Barbara's sense of not being successful was influenced by how much support was available, defining an unsuccessful experience as one where "a person doesn't get—get the support to meet the goals that they want in the time period that is reasonable to their personality and . . . their goal setting." Linda termed the lack of support as a "biggie." The importance of support for breastfeeding success is consistent with the conclusion by Raj & Plichta (1998) that breastfeeding duration is enhanced by both informal and professional support. The identification of support, or the lack of support, by the women in this study as important to breastfeeding success distinguishes this study from previous studies by Leff, et al. (1994) and Hauck & Reinbold (1996), that were more focussed on individual factors associated with success or lack of success.

Several of the women described how they tailored breastfeeding to meet their needs within the constraints they faced. Two women, Bonnie and Elaine, expressed and pumped milk and bottle-fed so they could continue to provide their milk to their babies even when breastfeeding itself was not working out for them. Fiona used a bottle of formula throughout her successful experience as a "security blanket" after a difficult first experience. And while Bonnie was never able to comfortably breastfeed outside the home, which she acknowledged put constraints on her, she continued to enjoy breastfeeding for over two years. Both Fiona and Bonnie were aware that their experiences might diverge from other women's experiences or policy recommendations on breastfeeding and agreed that breastfeeding experiences need to be defined by the mother, not others. As Bonnie put it:

> One thing that I would like health professionals, or people in the community to get across to mums, is that … success in breastfeeding is whatever is successful for that mum. Not what's written in the books, not what the nurse says, not what the doctors say.

This focus is consistent with the finding that breastfeeding is a personally defined experience (Hauck & Reinbold, 1996). While social pressure was not clearly identified by most women in this study as an important factor, the above comment supports the recommendation by Schmied, Sheehan and Barclay (2001) that the promotion of breastfeeding must take a flexible perspective that "allow[s] for diversity in individual breast-feeding experiences" (p. 44).

Although most of the women in the previously cited studies (Leff, et al., 1994; Hauck & Reinbold, 1996) were white, middle class and well-educated, as were the women in this study, the current study results also appear similar to those of Martens (2000) who focused on Manitoba First Nations women. The researchers found that dissatisfaction with breastfeeding at two weeks postpartum was a marker for early cessation. Women who identified themselves as "unsatisfied" with breastfeeding were 12.4 times more likely to wean as women who were "satisfied." Dissatisfaction was associated with two or more breastfeeding problems.

In summary, when breastfeeding did not meet the women's expectations of maternal and infant satisfaction, it was described as unsuccessful. Duration of the experience was not a key indicator of success for these women. Lifestyle compatibility was emphasized less by these women than in Leff, et al. (1994), but the availability of timely, effective and accessible support was identified as a key element in the attainment of breastfeeding success. While each woman approached breastfeeding with different goals and expectations and the experience was individually defined, breastfeeding success was described as a "big deal" and they wanted others (health care providers, family, friends, and community) to realize how important it was and to support their efforts to succeed. For the women whose first breastfeeding experience or experiences were not successful, this feeling of missing something, of needing to see what it was like to be a successful breastfeeding mother, enhanced their commitment and desire to achieve a successful experience. For the women who had an unsuccessful experience after one that was successful, breastfeeding did not meet their expectations and they felt loss for what they knew the experience could be.

Achieving a Successful Experience: Inhibitors and Contributors

The women who participated in the study spoke willingly and broadly about their experiences. Some expressed their appreciation for the opportunity to discuss both their unsuccessful and successful breastfeeding experiences. All seemed to appreciate having someone recognize and affirm the effort they had made to overcome difficulties and to achieve success.

The women identified a number of factors that either contributed to or inhibited their achievement of breastfeeding success. The most important inhibitor identified by the women was their high expectations of the experience compared with the realities of new motherhood and the effort that was required to establish breastfeeding. These expectations were related to inexperience, a lack of knowledge and skills, and inadequate professional and informal support appropriate to their needs when breastfeeding difficulties arose. Women also seemed to ground their personal expectations in their perceptions that breastfeeding is the appropriate choice of "good" mothers concerned about their infant's health and, therefore, that it would be a natural, easy aspect of mothering. Conversely, contributors to success were identified as increased experience and increased knowledge and skills, moderated expectations that led to a more relaxed and flexible approach to infant feeding and care, and timely, appropriate and accessible support. The factors that inhibited and contributed to the achievement of breastfeeding success affected how satisfied the women felt with breastfeeding and were associated to some degree with infant satisfaction.

Following is a discussion of aspects of the results of the study as they relate to the above factors for the prenatal period, the birth and immediate postpartum period, as well as the period following the woman's discharge from hospital.

Prenatal Preparation

The women in the study said they had felt confident prior to the birth of their first child that they were ready for breastfeeding. It was only later when they had a chance to reflect on the experience that they realized they had not been well enough prepared.

Personal learning. Many of the women prepared for their first breastfeeding experience primarily through reading books and Internet websites. One of the benefits of the reading was that the women appeared to gain motivation to breastfeed from the information. For example, Brenda read that breastfeeding could be protective for breast cancer. Because her mother had had the disease, she found this to be a motivator towards breastfeeding. Gwen did "lots of reading" and also mentioned a radio broadcast that got her attention when it

> talk[ed] about how allergies—kids that have more allergies or have problems with asthma and stuff, if they didn't breastfeed, if they bottle-fed instead, and my husband has really bad allergies so I know that was a real fear for me.

The women described learning about the benefits of breastfeeding at prenatal classes and through their reading, but none mentioned having read or learned about the potential hazards of artificial feeding (International Lactation Consultant Association, 1992, 1998; Chen & Rogan, 2004). This lack of knowledge would limit the ability of women to make a fully informed decision about the use of formula either as an alternative to breastfeeding or if they encountered problems with breastfeeding.

Some of these resources the women accessed provided out of date or inappropriate information, such as in Brenda's case, where an outdated and potentially damaging method of prenatal nipple preparation was used. This points to the importance of health care provider guidance so pregnant women can identify accurate, evidence-based information to learn about breastfeeding.

While most of the women in the study indicated they had read about breastfeeding prior to their first baby's birth, this was not identified as sufficient to prepare them for the experience. This is consistent with the Canadian Task Force on Preventive Health Care (Palda, et al., 2003) recommendation that written information alone or in combination with other education methods is not sufficient to extend breastfeeding duration.

The way in which the women in the study described how they did not hear, or did not grasp the importance of critical pieces of information that they realized later had been important may provide some insight into why print materials alone are not sufficient. They talked about how information "didn't sink in," or 'didn't make sense" before they had tried to breastfeed. Another woman described not "get[ting] it." As discussed later, this finding points towards the need for more effective prenatal breastfeeding education

Prenatal education by physicians. For most pregnant women, their first contact with the health care system will be through their family physician or obstetrician. Many women see a physician regularly throughout the pregnancy. It therefore seems that the physician would be in an ideal position to begin the discussion about breastfeeding and to provide information and guidance, particularly in a rural or remote area where access to other sources of professional breastfeeding education may be limited.

None of the women in the study described receiving anything substantive in the way of prenatal guidance or education about breastfeeding from their physicians. They described these interactions simply as one where the physician asked them if they planned to breastfeed. When they replied that they did, they received a verbal affirmation, such as "That's good." Brenda described her encounter with her doctor this way:

> [My doctor] was a man … not to be prejudiced, but I did think, you know, he'd never done it [breastfed] so he didn't—he just said 'okay, well, that's good you're doing it' and that was it."

None of the women reported having a history taken by their physician about factors that could create breastfeeding difficulties, such as breast reduction surgery, or of receiving a prenatal assessment of nipples and breasts, such as that recommended by Riordan (2005) and Health Canada (2000). Nor did they report that their physicians asked whether they had questions about breastfeeding, provided guidance about appropriate reading, or informed them about available community resources where they could receive prenatal breastfeeding education and contact with experienced breastfeeding mothers.

Linda expressed a general lack of confidence about physician care with regard to breastfeeding, but also had a clear idea of what role she saw for them regarding the breastfeeding decision and follow-up:

> I believe that where that needs to come from is from the doctors in the prenatal check-ups. That support has to be there from the doctors. The doctors can't be lackadaisical about it and say [about the feeding decision], "Well, you know, whatever." They have to say "I'm going to help you breastfeed this baby, and

these are the resources you need to look into, these are the books you need to read about why."

The Canadian Task Force on Preventive Health Care (Palda, et al., 2003) identified a lack of evidence about the effect of the primary care physician or obstetrician's advice on breastfeeding duration. Because most women see a physician early and regularly during pregnancy, this appears to be a missed opportunity for prenatal education about breastfeeding, a physical assessment, discussion about parental breastfeeding knowledge and expectations, as well as advice on resources available within the community and outside the region.

Prenatal classes/education. All but one woman in the study attended prenatal classes prior to the birth of her first baby. The women did not describe the classes as providing adequate preparation for breastfeeding, consistent with other studies (McLeod, Pullon, & Cookson, 2002), although several credited the information about breastfeeding benefits received during the class as a factor in their decision to breastfeed.

The women talked about how it would have been helpful to know more about breastfeeding techniques, as well as receive guidance about what to expect or how to deal with problems. Debbie received some technical instruction about breastfeeding in the prenatal class that she attended in a larger city, but she found the actual experience was quite different from what she'd imagined so the instructions were not as helpful as they might have been:

> They [prenatal classes] basically told you the technique, you know, how to latch the baby on and make sure the head isn't turned and stuff like that but ah, actually doing it was—you kind of—I think I was kind of expecting my baby to know how

to do it and—it seems like the most natural thing in the world, but it is—it was a lot more difficult than I had anticipated.

Concerns expressed by women in this study further support the conclusions of Schmied, et al. (2001) that prenatal classes need to shift the current focus from promoting the benefits of breastfeeding to providing education about the practical aspects of the experience. One strategy suggested is to include contact with experienced parents.

The literature points toward ways of making prenatal education more relevant for first-time mothers. The Canadian Task Force on Preventive Health Care (Palda, et al., 2003) concluded that individual or group educational sessions lasting between 30 and 90 minutes and containing structured content (e.g., anatomy, physiology, nutritional issues, instruction on practical skills, discussion about common fears, problems and myths) were effective in increasing short-term duration rates (to three months), but not longer term (to six months). A prenatal breastfeeding skills group education intervention in Chile (Pugin, Valdes, Labbok, Perez, & Aravena, 1996) concluded that "prenatal group education with hands-on skills reinforcement is a significant and additive component of breastfeeding support, especially among those who have no previous breastfeeding experience" (p. 15). Hogan (2001) reported on a study to identify barriers to breastfeeding in a region of Nova Scotia and the increased duration rates that resulted from a regional initiative that included improved educational and support programs.

Peer support. When the women described prenatal preparation prior to their first baby's birth, they seldom mentioned having contact with experienced breastfeeding mothers. Their social networks often did not include women with successful breastfeeding experiences or where they did, the experiences had been negative or the women perceived that the other women had breastfed without difficulties. Brenda said that before her first baby was born she did not know any mothers who had breastfed, although she had heard from a neighbour about her "horrible experience." Her mother and mother-in-law were described as having an attitude that the "bottle was more convenient and it was almost like you were more evolved if you bottle-fed." Linda described people in her life who did not understand her desire to breastfeed and who

> didn't see anything wrong with bottle-feeding, and they didn't see it like I would, see it [bottle-feeding] as a failure. . . They thought as well, that's just the way you feed a baby, is with a bottle. They didn't know anything different.

Elaine also had little experience within her social network from which to draw. In her family

> it's not a—I wouldn't say people think it's a bad idea, but it's not—like I don't think most of my mums, aunts, etc., did it. My mum did with me for a little bit and then she ended up having to go to hospital to get an operation so she stopped. But I don't—my impression [of their attitude] is, you know, "if that's what works for you, good, but if it's not working why are you struggling with it?"

Many of the women were, as Debbie described herself, the first in their peer group to have a baby, the "pioneers." Debbie said that she "hadn't really talked to anyone. I read a little bit in my pre-natal book but I really didn't expect that I would have problems." Her mother had told her about La Leche League, a community-based support organization, but she didn't realize it was available in the city where she lived and she "never saw anything" about it at her physician's office or at the public health centre before or after her baby was born. Looking back, she said that

> If someone had told me, hey, this [breastfeeding] is difficult, you should look into something that can help you get started, you know – . . . I think it really would've helped—if I could've connected with at least one other person that [was] maybe in a similar situation...

Fiona had a negative experience with La Leche League with her first baby, but when she attended after her second baby's birth as a result of a public health nurse's referral, the experience was far more positive. She recognized that it may have made a difference to attend during her first pregnancy rather than after she was having breastfeeding difficulties because

> You would have had time to assess the group, see who maybe you wanted to listen [to], who you didn't always, you know… Um, and you're rested, you're sane, you're sitting there just pregnant (laughing), and, you know, you're not all a bundle, worrying about… I think it would have made a big difference. . . Yeah, that, too [connecting with other mothers], especially for that first baby when you didn't have any … network of mums.

This sense of connecting with and learning from other women is consistent with a British study (Hoddinott & Pill, 1999, 2000) where women identified a prenatal "apprenticeship" as being more useful than trying to learn from consultations or books. Hogan (2001) identified the value of having women who were presently breastfeeding or had previously breastfed to be available to provide education as well as experiential knowledge for prospective mothers. O'Campo, Faden, Gielen and Wang (1992) called for "confidence building strategies" to be incorporated into prenatal care that would include

> helping women identify personal solutions to common breastfeeding problems and providing breastfeeding demonstrations by other mothers from the community. This latter also provides an opportunity for role modeling, thus helping to address the important factor of social learning. Normative beliefs can be influenced clinically by inviting individuals significant to the woman to participate in breastfeeding promotion and having all health caregivers (nurses, physicians, nutritionists, etc.) convey consistent supportive messages (p. 201).

La Leche League is an example of a program that includes prenatal and postpartum education and contact with experienced mothers that provides the modelling recommended by O'Campo, et al. (1992) and Hogan (2001). It was the only program of this kind available in either community but none of the women recalled being informed about the program during pregnancy. Health care providers may have been unaware that La Leche League meetings are open to pregnant women. As with any volunteer-run mutual aid group, the quality of service offered by La Leche League groups may vary according to the skills of the volunteer leaders and the perspectives of women who are in attendance. The appropriateness of the service may also vary for individual women, depending upon whether or not they feel welcome and accepted, and whether the group is comfortable for them culturally.

In summary, the women whose first breastfeeding experience was not successful identified that prenatal preparation they undertook by themselves or accessed through classes did not adequately prepare them. Based on the experience of women in this study, effective prenatal education needs to include a variety of strategies, including contact with experienced breastfeeding mothers who can act as role models and can help prospective mothers moderate expectations and be better prepared for the early, sometimes difficult, days of breastfeeding.

Birth and Immediate Postpartum Care

As described in the literature review, there is conflicting evidence about how the birth experience may influence the start of breastfeeding. The birth experiences of the women in the study varied greatly, from uncomplicated medication-free vaginal births to emergency caesarean deliveries. Some described their experiences as "perfect," "textbook," and "good" and yet went on to have breastfeeding difficulties that resulted in unsuccessful experiences. For others, a difficult birth may have influenced the start they got with breastfeeding, in particular with a first baby. Bonnie described a difficult first birth experience that left her with little physical or emotional reserve to deal with breastfeeding problems:

> The whole experience was a big shock. And it was, you know, after 29 hours of labour and, most of it hard labour, and forceps, and the whole thing, for the first week after the birth, I don't think I was functioning, at all . . .

Both Gwen and Sarah, whose first breastfeeding experiences were successful, had intervention-free births that may have helped to create conditions (such as an alert baby with unimpaired sucking abilities) for success. Sarah described her experience in this way

> I just breastfed and he latched on perfectly and I didn't need any help—it just worked out well—he was very alert, very there, and I didn't have any problems—so it was really easy . . .

Linda described her third birth, which resulted in a successful breastfeeding experience and where she was accompanied by a doula, as very different from her previous births. It was without medication and with "no stress, no tension, just nice calm, quiet—no screaming, no yelling." But for other women, by the second or third baby, the influence of the birth appeared to have less influence on breastfeeding. A number of the women, for example, had caesarean deliveries with their second child and went on to have successful breastfeeding experiences. Brenda had an emergency caesarean delivery and was separated from her second baby in the first days after birth. She spoke with a sense of pride that she had been able to breastfeed despite these barriers:

> And if anything was going to make me stop it would've been that, 'cause I had to get off the bed, get in a wheelchair and get—or—or walk down with this pole of IV all the way down to Special Care to nurse him every hour and a half . . .

She thought that the caesarean delivery had even helped her with breastfeeding because it allowed her to focus more on the baby: "Ultimately it worked out, I think, to our advantage [having a planned caesarean delivery] in terms of us bonding, because I didn't feel compelled to do housework [like with the first baby]."

Since the birth experience may influence how soon colostrum is available and lactogenesis (the process that enables the breast to secrete milk) occurs, the need for skillful and sensitive postpartum care, particularly for first-time mothers, is highlighted. Kroeger (2004) has described how a natural birth process results in a mother and baby that are "hormonally 'programmed' [to breastfeed] with beta-endorphins, catacholamines, physiologic levels of oxytocin, along with other factors still not well understood" (p. 238). She states that "the nature of the childbirth and breastfeeding continuum is such that randomized-controlled clinical trials may never be able to capture the complete picture" and calls for perinatal researchers "to design studies with breastfeeding as an outcome" (xviii). She has further argued that studies showing that the birth experience has no influence on breastfeeding duration may be confounded by the increasing presence of lactation specialists in hospitals, who report that their skills are frequently required to help rectify problems created by childbirth. Dewey (2001) reported on the results of three studies that showed that long labours and urgent caesarean deliveries were risk factors for delayed lactogenesis. She recommended that any mother who has high levels of stress during the birth should receive extra help to establish lactation during the first week or two after the birth, noting that "with such guidance, nearly all such mother-infant pairs (e.g., those who experience long labor or have an urgent caesarean section) can be successful at establishing exclusive breastfeeding" (p. 3015).

Sarah described having a natural birth in a facility where she could maintain proximity with her baby and have privacy to begin the breastfeeding relationship:

> He didn't nurse right after but I didn't let them take him or anything . . . we took him back to my room and, when we were there . . . and then I was by myself and he was still really alert 'cause we tried feeding him in the labor room but he just—he was so alert and . . . there were so many people, he was just looking around and curious, so then we were in the room and we were by ourselves that's when—I was by my—I wanted to [be by myself]—I was like, okay, nobody's here, I want to do it.

Mothers and their infants need quiet, uninterrupted time together, if possible, to begin breastfeeding. Small (1998) has pointed out that "breast-feeding is not necessarily an automatic response for any mammal, especially under less than natural circumstances" (p. 178) and has noted that since "breast-feeding is instinctually and biologically triggered, . . . it can also be behaviorally disrupted" (p. 179), such as through mother-baby separation. The *Ten Steps for Successful Breastfeeding* (World Health Organization & UNICEF, 1991) directs health care providers to help mothers initiate breastfeeding within a half hour after birth, and there is evidence that when babies are given time to complete what Blair (2003, cited in Cadwell & Turner-Maffei, 2004) calls the "familiarization phase" before latching, mothers are less likely to experience sore nipples.

Once Sarah had latched her baby on and fed, she wanted a nurse to watch what she was doing and provide reassurance that what she was doing was correct. Instead, she received intrusive care. A nurse came into her room and asked Sarah if she knew how to breastfeed. Sarah replied "I think so 'cause we just did it." Sarah reported that the nurse then "grabbed my breast and she grabbed his head and just stuck it together and I'm like 'Can I just show you how I did it and you can tell me what's wrong or what's not?'" Sarah said she realized that handling women's breasts may be "probably pretty casual to them" but despite being a "pretty comfortable person," she said she remembered thinking, 'My God, like, I found that awkward." She said this wasn't enough to deter her from breastfeeding, but recognized that the nurse's actions could have been upsetting to another mother.

When the nurse did give feedback, Sarah appeared to be confused, perhaps because it was not specific enough:

> [A]nd she was like, "Oh, you've got a natural" . . . and then she said to breastfeed—switch sides for the first little while—I don't think she said specifically how long and then, after that, to just empty the one.

Elaine described her first baby as "knowing what to do" and having a good latch at first but that she later received "a lot of really mixed advice" and assistance that made her feel hurried and pressured. There appeared to be a lack of sensitivity by some health care providers to the infant's readiness to feed and Elaine's ability to be responsive to her baby's feeding cues:

> I don't know, but the first time [first baby] I had so many people in there and, you know, just saying 'Okay, you've got to feed her now—you've got to feed her now, you've got to feed her now' and it was like, "You know, she'[s] just gone to sleep so I don't want to feed her right now."

When another nurse with a more relaxed approach reassured Elaine that waiting until the baby was ready was an appropriate course of action, Elaine asked herself, "Where were you [earlier]?"

Debbie, whose first birth occurred in a larger urban centre, also talked about being frustrated with assistance from some nurses, but then receiving more effective assistance from a staff lactation consultant:

> In the hospital, I was— in the postpartum [unit]—I found it very difficult 'cause I just thought I could just pop her on, and every nurse had a different way of telling you how to do it, which was *so* frustrating . . . Before I went home, I actually saw a lactation consultant in the hospital—she came and she was wonderful—she just—like "This is how you do it—don't listen to these other nurses 'cause everyone's got a different way…" and the way they were explaining it to me just didn't make any sense. . . So after I saw the lactation consultant, it was better—I was getting better latches.

Some of the women described what appeared to be a casual approach by health care providers to the use of bottles and formula when breastfeeding difficulties were encountered in the early days. Linda noted that she had the impression from some staff that "You have a problem with breastfeeding and that's it, you go right to the bottle." When she developed a blister on her nipple on the third day postpartum and nurses offered bottle-feeding as a solution, Linda described how this affected her when she felt "vulnerable:" "You just do what you're told and that's what happened and—and from there on, she was bottle-fed."

Elaine's first baby was given a bottle of formula for low blood sugar (hypoglycemia). The hospital staff at the time appeared to be unaware of current guidelines for treatment of hypoglycemia that included frequent breastfeeding and other measures supportive of breastfeeding if formula is medically indicated (Academy of Breastfeeding Medicine, 1999). By the second baby, Elaine checked about the protocol for hypoglycemia at the hospital and was told that if formula were required, a cup would be used.

Fiona had observed situations where interventions that avoided the use of bottles were being used that were then criticized by physicians:

> And so I've seen it since with friends, where I've been very involved with their delivery, at the hospital afterwards, and different doctors coming in, "You know what, give him a bottle…" "You know what, what's this tubes and all that business? That's ridiculous. Give him a bottle."

When staff and new mothers are unaware of the physiology of milk production and options if an infant does need assistance, concern about milk supply can lead to the inappropriate use of bottles and formula. The use of formula and bottles as described by the women in the study is inconsistent with the recommendations of the Baby-Friendly™ Initiative, Health Canada's *Family-Centred Maternity and Newborn Care National Guidelines* (2000) and evidence supporting the initiative (Kramer, et al., 2001). It can lead to continuing problems with milk production and the ability of the infant to effectively breastfeed.

Four of the women in the study mentioned that with their first babies, hospital nursing staff told them that their milk was "slow to come in." Brenda described her situation

> [The baby was] supplemented from the beginning because my milk was really slow to come in and the—within 48 hours, he was really hungry and screamed non-stop and he wasn't getting—and the nurses said he's, you know, 'The quality's there but the quantity's not,' so we supplemented.

Brenda was discharged with sore nipples and supplementing with a bottle and formula.

Fiona had a negative experience as a result of conflicting advice and different staff perspectives on the use of formula. When the baby was unsettled and neither he nor Fiona was sleeping well, a nurse suggested feeding the baby some formula with an eyedropper. Fiona gave permission to do this, but another nurse was upset with this action and reacted inappropriately:

> The next morning another nurse came on shift with the chart and came and reamed my ass. She was angry! "World Health Organization this, and World Health Organization that." And, "You're trying to have a successful…you've just jeopardized all these four days of hard work, and … and . . ." I'm crying and she's

> [saying] "I'm just trying to encourage you, I'm just trying to give you the information so that you don't make the wrong choice." So through that whole nine months, I thought I was making the wrong choice, every time I put the bottle in his mouth. . . "Oh, God."

The nurse appeared to be aware of the WHO/UNICEF *Ten Steps to Successful Breastfeeding* and was trying to educate Fiona about potential problems with the early introduction of formula and bottles. Despite the nurse's good intentions, Fiona was left feeling like she had failed and had made poor choices. She described this as later contributing in part to her reluctance to seek help when she was depressed, had a milk supply that appeared chronically low, and an unhappy baby who was gaining weight slowly: "I was so ashamed that I wasn't nursing him [full-time]. Who do I confess this horrible thing [formula supplementation] to?

Staff seemed unaware, or did not inform the women, that it is common for first-time mothers and mothers who had a difficult or caesarean delivery to have slower lactogenesis or to perceive that it is slower (Ingram, Woolridge, & Greenwood, 2001; Dewey, 2001). Riordan (2005) states that while it has not yet been clearly established whether the delay after a difficult birth is "a maternal physiological response, or due to delayed or ineffective suckling, or a combination of factors" (p. 220), what is known is that early, frequent and effective breastfeeding is what is most important in establishing normal lactation.

Many of the women described their subsequent postpartum experiences in more positive terms than their first, even though a number had what could be considered difficult second births (four of the nine had caesarean deliveries). This may have reflected their increased experience and confidence, or improved quality of support from hospital staff. It may have been due to changed expectations that were now grounded in experience. They may also have been better able to advocate for themselves. For instance, Fiona's first baby was tongue-tied, which contributed to the breastfeeding difficulties she encountered. After the second baby was born, she described how "[W]e checked for tongue-tie the minute she was out…(laughing)." The mothers also reported being more likely to seek help from trusted sources or obtain a second opinion.

Fiona described her time in the hospital as being as different as "night and day, they were fully breastfeeding supportive." Elaine used the same phrase ("as night and day"). She also said that her second baby was "easier." As well, she described how staff seemed to treat her differently as a result of her being a second-time mother. With her first birth, she had felt hurried and pressured to feed; this time the staff left her alone more:

> [P]eople just—like, this time, nobody worried about anything with [second baby]. Of course, I'm—I was second [time mother]—like, I say, like that was just easier [right away] because I'd done it before, you know. She's also an easier baby . . . but also the nurses were much, um, easier about that—I don't know, I think they assumed I knew what I was doing, so they just didn't come.

Hospital staff also appeared to be more supportive of Elaine feeding when the baby showed signs of wanting to feed. This time, they offered reassurance to her when her milk seemed slow to come in, and the baby was not gaining weight: "They said 'We'll give it another day' and then it came in, and things were fine." A nurse explained that it was not uncommon for there to be a delay in the milk coming in after a caesarean delivery, which Elaine found reassuring.

In contrast to the way Elaine appreciated having less attention from hospital nurses, Barbara sought out more assistance while in hospital following the birth of her second child. She described how she relied on a nurse she had identified as being knowledgeable:

> I got help right from the beginning, and I refused to get into trouble, you know what I mean? I knew enough not—how not to get into trouble with him because I said to the—like the nurse that came in and helped me for about three feeds in a row with him—I said, "You know, like if you hadn't have been on, I probably would've gone home with, like, in big, big trouble," and she said "Yeah, you would've, because it [nipple] was just starting to get raw and starting to [crack]…" . . . She had been on the night he was born, and then she was off for a shift, and it only took one shift for me to like start to be [cracked].

Although Barbara found help from staff while in hospital, she also showed her increased knowledge and confidence when she used a moist wound healing technique to manage sore nipples. This technique, which she had learned from a breastfeeding clinic lactation consultant with her first baby, was unfamiliar to the hospital nurses.

There are strategies that health care providers could use to ensure that new mothers get the assistance they require to successfully breastfeed. Blyth, et al. (2002) listed strategies to identify mothers with low self-efficacy and to enhance their confidence, consistent with the self-efficacy framework developed by Dennis (1999), that are appropriate while mothers are in hospital, as well for when they are back in the community. These included reviewing any previous breastfeeding experience, ensuring mothers have multiple opportunities to breastfeed before discharge from hospital (performance mastery), identifying women with low self-efficacy and providing additional support, introducing confidence-building strategies to maintain breastfeeding, providing anticipatory guidance that acknowledges and normalizes early breastfeeding experiences (e.g., pain, fatigue), and providing vicarious experience by bringing together new mothers to share experiences.

Several women in this study, similarly to mothers in a study in a large US hospital (Hong, Callister, & Schwartz, 2003), identified positive forms of emotional and practical breastfeeding support that were significant to their hospital experience. The mothers in the Hong, et al. study identified positive nursing behaviours such as calming reassurance, showing concern and respect for personal space, counseling that enabled the women to take the lead in breastfeeding and retain some sense of control, remaining with the mothers during a feeding, and being flexible and open to trying different approaches. Health care providers need sufficient training and experience to avoid what Cadwell and Turner-Maffei (2004) term a "cookie-cutter approach" when problems are encountered and solutions are proposed. They argue that this approach can complicate the problem-solving process because solutions are constructed to remove symptoms rather than to determine the dynamic causing the problem.

Women's experiences in this study reveal that counselling style and content is important. As Bocar and Moore (1987) have noted, in the early stages of new role acquisition new mothers tend to idealize health care providers and look to them for all the answers. Bocar and Moore call for health care providers to keep their suggestions simple and with few alternatives unless the mother specifically asks for more information, because a "cafeteria style of counseling" (p. 9) may be overwhelming for new mothers. Once they have reached the next stage of role acquisition and the rules and directions that they initially found helpful begin to be modified by interaction with peers and through increased feelings of confidence and competence, more varied guidance can be given.

In summary, this study identified important gaps in the consistency and appropriateness of care received by mothers in the immediate postpartum period. Hospital staff appeared to have knowledge and skill deficits about breastfeeding. It appears that opportunities were missed to reassure mothers or provide information and guidance that was appropriate to the learning needs of a new mother. The content of postpartum education offered to mothers while in hospital, as well as the level of skill of those providing assistance and the manner in which it is offered may be highly influential at the start to breastfeeding, particularly for first-time mothers.

Postpartum Support from Professionals

In rural or remote communities, such as where this study took place, the professional sources of community breastfeeding support available locally may be limited. While texts and studies frequently recommend that new mothers be assessed by and receive follow-up service from a lactation specialist (Cadwell, Turner-Maffei, O'Connor, & Blair, 2002; Riordan, 2005), a health care provider with a speciality in lactation may not be available. Follow-up in the community then falls primarily to physicians and public health nurses. If their knowledge and expertise in lactation management is limited, mothers who experience breastfeeding difficulties may not receive the quality of service they need to have success with breastfeeding.

None of the women mentioned physicians as being a source of practical breastfeeding support after they were home with their new babies, and some described physician involvement in a negative way when they had received advice that was detrimental to breastfeeding. At the follow-up visit to her physician after the birth of her first child, Elaine received no practical suggestions about how to address the situation of a fussy breastfed baby whose weight gain was apparently not sufficient:

> I took her in for her—well, it's supposed to be a six-week check and it was about nine weeks [due to clinic backlog]. The doctor said 'Well, she's gaining—she's gaining but she could be gaining more, so maybe you should supplement.' That was the biggest thing [in the decision to pump and bottle-feed].

When asked what she would have done if this had occurred with her second baby, Elaine replied that she wouldn't have "stopped with the doctor," and that she would have sought other opinions. For instance, she noted that she had learned about growth charts for exclusively breastfed babies that are different from the older charts that health care providers commonly use, which helped her be more confident about what was appropriate weight gain for her second baby.

Barbara's knowledge and experience enabled her to avoid a potentially detrimental situation when she was breastfeeding her second child. She developed mastitis and visited the local emergency department where, in addition to antibiotics, she was prescribed a medication to increase her milk supply. When this did not seem right to her, she sought information from a trusted source—the breastfeeding clinic she had visited with her first baby—where she received confirmation that the medication was inappropriate for the treatment of mastitis. Barbara had harsh criticism for physicians in her community as a result of this experience and her efforts with her first baby to find help for persistent sore nipples, terming them "clueless" when it came to breastfeeding issues.

Bonnie and Fiona both changed doctors because they were dissatisfied with the care they received with their first births. Bonnie wanted a very different birth experience and more supportive postpartum care, both of which she achieved with her second birth. Fiona had been unhappy with the support she received with regard to both breastfeeding and the physician's failure to diagnose postpartum depression, from which she suffered. She was quite satisfied with her new physician, in terms of the birth, his identification that she had postpartum depression with the first baby, and his sensitivity to the possibility that she might be at risk with the second baby. But as much as she liked this new physician, he did not provide help with breastfeeding support: "I loved, you know, I thought he was a great doctor, but … 'As long as the baby's full' was all his worry."

Public health nurses garnered more positive comments than physicians from the women in the study, but even this support was not consistent in terms of the nurses' breastfeeding skills, knowledge, or accessibility. Debbie said she felt that breastfeeding wasn't really encouraged by public health (or physicians) in her community, saying that it didn't seem to be "really out there." She noted the lack of posters or information at the health unit, the lack of referrals to community resources, and what, to her, seemed to be an attitude of "car[ing] more about immunization [than breastfeeding]."

In terms of accessibility, several women had encountered breastfeeding problems at the end of the week or on the weekend, when there was little or no professional support available to them. Gwen's breaking point came on a long weekend. She had been pumping and supplementing with the pumped milk, but on the weekend

> We decided that wasn't good enough 'cause we figured it must've been my milk wasn't good enough so – so, then we ended up trying formula but—oh, I mean, that was the worst weekend ever . . . oh, it was just awful.

Elaine tried to connect with a community-based lactation consultant on the weekend, but

> it wasn't easy—like it wasn't easy to find somebody to come over and say "This is what you need to do" . . . I thought, I'm not going to sit around all weekend and let her starve.

Barbara showed persistence and perseverance as she pursued solutions to her problems. She was proactive in trying to find help, first accessing community supports as well as public health, several physicians in different communities, and a local lactation consultant in private practice. She connected with several public health nurses who "were very knowledgeable and very supportive," but found that services needed to be available throughout the week, not just on "certain days," because

> You need more help than that—like you need to be able to go to a place with your kid, and have somebody help you—four times if it takes that.

Although Brenda found the public health nurses who visited her at home "wonderful—you know, worked on the latch," there was apparently no further follow-up, and she continued to have problems with cracked nipples. She then developed mastitis that progressed to an abscess, requiring surgery. As a result of these difficulties, coupled with a baby who was described as "cr[ying] a lot and . . . really colicky," at 10 days postpartum Brenda and her husband decided that she would stop breastfeeding. Brenda blamed herself:

> I guess that was my fault, I should've followed up with them a little more when it didn't continue [to help]. I should've phoned them and said 'You know, this isn't going as well as I thought it was' but, I just gave up.

Barbara noted that for many people, including health care providers around her, breastfeeding did not seem like a "big thing," and that her problems were not taken seriously enough: "Everybody [including health care providers] minimized them—they said 'Oh, they'll just get on and you'll figure it out - *no*!!'" She said that they did not really seem to understand the severity of the pain and how, when offering suggestions, just didn't "actually get the impact of how often [the baby needed to feed]." She was frustrated with the lack of assistance in her community:

> I couldn't find people to help me succeed . . . I thought it really sad and disheartening that there wasn't very much help for people . . . It made me really mad that the supports aren't there for people. That was the thing that made me really frustrated."

Sarah had mixed experiences with public health services after the birth of her second baby. She remembered the nurse as "being so sweet and nice" and making a positive comment about her baby's weight gain, "Are you feeding her steaks in-between breastfeeding?" However, she also said she felt this nurse (and others) minimized her concerns about her baby's crying and apparent distress ("it's just colic"). The nurse did not appear to identify that Sarah was depressed as a result of social isolation and the demands of caring for a high-needs infant. Sarah had preconceptions about the role of public health nurses however, that may have influenced how helpful they could be. As a young lone mother she said she had fears about losing her children:

> Yeah, . . . I was afraid to [contact public health for more help]. I had a negative image of public health coming around too much, and I was so depressed which made me—and my house was a mess and I was neglecting my older [child]—like I just—I didn't know that they were supportive and open to that.

Later, after she had become involved with a prenatal nutrition program and had more involvement with public health, she realized that her fears had been unfounded, although she still had the impression that public health services [including the public health-sponsored mother's group] weren't as appropriate for women in her situation as they might be:

> I refer people there myself [now], but in some aspects, it's [public health services] kind of really directed towards—like middle to upper class people. I've never felt comfortable, just because I'm not there, you know, like I could never—and then … I feel inadequate as a mums 'cause I can't provide these certain things or these certain clothes or this certain whatever, and it's stupid, you know, but these sort of things do impact how you respond to people...

None of the women mentioned being referred elsewhere when the skills of local health care providers were not sufficient to address problems. Barbara only found out by chance about a breastfeeding clinic in Edmonton. She then made the 1000-km roundtrip to the clinic three times and by the time the baby was six months old had finally been able to resolve the problems. She said that it was not until she went to the breastfeeding clinic that she felt she received the recognition of the severity of the problem and the kind of assistance she needed.

> I couldn't find people to help me succeed in that, you know, until—like the breastfeeding clinic at least . . . it was like, thank God! They *really* wanted to help you, and they really knew what the heck they were talking about and that—I think if I hadn't of gone there, I would've been done [breastfeeding].

In this study, there were no reports of women receiving a thorough breastfeeding assessment prior to discharge from hospital or from local health care providers once home. Assessment is important, as Shrago (cited in Cadwell, et al., 2002) has noted, because "no assessment, inaccurate assessment, or assessment based on assumption, rather than clinical observation, can result in deleterious outcomes for mothers and infants" (p. 7). An assessment can provide the health care provider with an opportunity to provide a new mother with positive feedback as well as praise, education, reassurance, and affirmation, as well as constructive suggestions for modifications in technique. When health care providers do not have sufficient knowledge, skills, and time to provide an assessment and the accompanying education, new mothers are left on their own to work through breastfeeding difficulties. For many new mothers, this appears to result in the end of breastfeeding or an unsatisfying breastfeeding experience.

All the women in this study mentioned maternal pain in conjunction with their unsuccessful experience, indicating that this may be a factor in maternal satisfaction with breastfeeding or may point towards persistent infant problems with breastfeeding. The women reported pain from post-birth complications, pain from sore nipples, and for one woman, pain from mastitis that turned into an abscess. For some women, the pain was noted but was not described as the major reason for considering the experience unsuccessful. In Barbara's case, however, the persistent nipple pain was a factor that led her to consider her experience unsuccessful, even though the pain finally resolved around six months and she went on to breastfeed for another three months. She spoke of how the persistent pain affected her relationship with her baby because she just wanted to be able to "snuggle her baby" but couldn't because of the pain.

Pain appeared to be less prominent or less of a factor when the women described their successful experiences. Where it was present, it was noted in passing as having been taken in stride. This suggests that when other aspects of breastfeeding are going well, such as when the baby is content and gaining weight, maternal pain may be more readily tolerated. These results also suggest that to improve the chances of breastfeeding success, mothers need help to identify and address the source of pain, whether or not it is directly related to breastfeeding, so that it does not lead to unintended breastfeeding cessation.

In summary, the results of the study highlight the importance of the availability of professionally provided community breastfeeding support services. The women identified that physicians were not a source of breastfeeding support when they were having difficulties, did not refer them elsewhere for lactation assistance, and in some cases provided advice that was detrimental or potentially detrimental to breastfeeding success. Public health nurses provided variable assistance that was not always available to mothers when they most needed it. For mothers with persistent or complex problems, more expert lactation assistance was available only at a great distance from their community.

Family, Community and Peer Support

Papinczak & Turner (2000) found a significant link between strong social health and breastfeeding duration. Strong social health is related to the social support available, or perceived to be available, through a person's social network.

Once the women were home with their new babies, they realized they had gaps in their knowledge and experience, and gaps in the informal or nonprofessional support available to them to help them. Many women had limited awareness of the practical aspects of breastfeeding, were inexperienced with babies and had little contact with other breastfeeding mothers who may have helped the new mothers to moderate their expectations and to normalize the difficulties they were having. A number of women talked about how when they encountered difficulties with breastfeeding, they felt like "a loser," or wondered, as Debbie did: "Why can't I do this? Other mothers do this. I mean, what's wrong with me?"

The fathers also had little experience, and friends were generally excited for the new parents and wanted to help, but without children of their own, frequently were unable to offer practical help. Fiona described her situation with a touch of humour:

> When I had my first one, none of my friends had had kids yet . . . no support. No family up here. Um, many of my friends didn't have kids yet. It wasn't until we had kids that we made friends with kids… So, um, there was no support, whatsoever. They, you know, they came by and brought a little gift, that was nice, and they looked at the baby, and left.

The first-time fathers seemed sometimes ambivalent, confused, or uncertain about how they might best provide support, particularly when breastfeeding problems arose.

The women described their partners as supporting the decision to breastfeed, and helping as they could, but not always effectively. Elaine, for instance, described her husband as trying to be supportive by agreeing with what she wanted to do. She then compared this by describing the support a friend had received from her husband:

> Oh, I think [my husband] was probably somewhat—I'd say enthusiastic, not as much as some, though. I have a friend that—in [another country] but they—her husband wanted her to breastfeed and—yeah, definitely no matter what, and she did have a lot of problems and they did—she spent a lot of money on a consultant to get it going, but he really wanted [her to breastfeed], you know, that's what he wanted. And [my husband] wasn't like that. . . And I think he—his idea of being the most supportive was just going with what I wanted to do.

A number of the partners tried to be supportive by encouraging the women to use a bottle or formula. Fiona's husband insisted that she supplement their first baby when it was apparent that breastfeeding was going poorly and Fiona was "falling apart." With their second child, he proposed using formula right from the start, to avoid a repeat of what had happened with the first child. Barbara's husband also encouraged the use of the bottle in response to her struggles to breastfeed with badly cracked nipples: "Meanwhile, my husband's going 'Well, let's just *bottle-feed* him—God, you're like a basket case, you know.'" Brenda's husband, on the other hand, had become quite informed about breastfeeding and offered practical help to the best of his ability: "And, like, my husband was really supportive and, you know, "Let's just try this and let's try that" and we tried different holds . . ."

Prenatal classes have been identified as being potentially effective at engaging prospective fathers' interest in breastfeeding and providing them with concrete information on how they might best be supportive (Giugliani, et al., 1994; Susin, et al., 1999). The women in this study, however, did not identify the classes as having been helpful in this way to their partners.

The grandmothers, who frequently had no experience with breastfeeding, provided little support to women in the study. Brenda described a mother and mother-in-law who were indifferent to breastfeeding due to their own lack of experience: "They were sort of like well, whatever—yeah, you know, whatever, go on the bottle—you kids were fine on the bottle, there's nothing wrong with the bottle." Gwen felt that while her family was supportive, her in-laws gave her the impression that "breastfeeding is great, but you should go do it in the bedroom." Grandmothers also frequently encouraged women to use a bottle and formula when breastfeeding did not seem to be going well, apparently because they did not know how else to manage the problems.

Sarah described both positive and negative support that she received while living at home with her parents and brother. Her boyfriend was described as being "indifferent" about breastfeeding, but also happy not to have to spend money on formula. Sarah's parents were "okay with it [breastfeeding]" and supportive by just "let[ting] it be." Her older brother, however, "hated it—loathed it. . . [I remember him] coming into the room and then just turning around and leaving saying really rude things like 'ooh, that's so gross.'" Interestingly, Sarah mentioned that when her brother and his wife had a baby that was breastfeeding, he was "totally comfortable with her, I think because . . . I broke him in."

A number of the women described feelings of depression or isolation. Some women had limited available support from family who lived far away, and as the first in their social group to have children, did not have a network of friends who could be of help. Sarah's social network was not adequate for what she needed after the birth of her second baby. She described a much-diminished support network—she was living in a new community, far from family and friends, she lived in a physically isolated location, and her relationship had recently ended, so she was a lone mother with an older child. All these circumstances may have exacerbated the physical and breastfeeding problems she experienced and contributed to the depression she described. It was only later, after she had stopped breastfeeding and was less depressed, that she took steps to rebuild her support network by attending a mother's group.

Linda talked about what she would have appreciated from members of her support network:

> That's the biggie—the lack of support from your family, from your friends, from people who—the worst part, who knew me well—that is the worst part but nobody asks you what do you want to do—those are the key words. . . "What do you want to do, and how can I help you achieve it?"

Some women accessed community resources, with limited success, once their babies were born and they had problems with breastfeeding. Barbara appeared to feel alone with her breastfeeding problems and that no one really understood what a difficult time she was having. She telephoned a La Leche League Leader in her community, who was unable to help with the breastfeeding problem, but invited Barbara to attend a meeting. Barbara dismissed this option because she thought only women having success with breastfeeding would be in attendance, thinking: "Oh, super. Well, I'm not going to go sit around with a bunch of people that are just like 'Oh, isn't this the most wonderful thing' when mine is not." She said that when a public health nurse saw that she needed to get out and talk to other mothers, she

> linked me up into that group [the mother's group run by public health] and I [had] the littlest baby . . . I can remember them all like, looking at me like I was insane [upon describing the problems with cracked nipples], you know what I mean, and [the nurse] kept saying - "See, these people are all like—they're having an okay experience, [Barbara], it'll be okay"... so that was kind of good too because they sort of—I guess that was like, you know, hanging out with La Leche League people or whatever but, you know, they were all just "Oh my God, I can't believe it's that gross [the sore nipples]!" They didn't get it at all because if you haven't had that pain you have no clue.

While women in the group potentially offered support from their successful experiences, they were not seen by Barbara to be supportive in dealing with the specific difficulties that she faced. The practical support she sought was not found in this group.

In contrast, with Gwen's first and successful experience, she found that talking with other mothers was valuable:

> I remember when I got the sores and that, I was a little bit flustered but, you know, just having someone else—'cause my best friend was going through the whole same thing at the same time—her little guy was four months older and talking to her and that, helped.

The new mothers found, though, that women who had not experienced problems with breastfeeding were of only limited help. Elaine mentioned a friend who provided "a little bit of support," but noted that

> because [she] had breastfed her first son and was breastfeeding her second and just because things kind of went smoothly, I don't think she really knew what to do to help me, you know, like things just worked for her . . .

Several women also mentioned attending a mother's group after the birth of their first child. In general, they found it encouraging and supportive to be with other mothers, although Debbie noted that since few of the women in attendance continued to breastfeed past a few months, breastfeeding support was not as prominent as she would have liked.

It was only after their first babies were born and they had experienced breastfeeding difficulties, that the women sought out experienced mothers to talk to, to get support, and to help to normalize their mothering and breastfeeding experiences. They spoke of how what they heard made more sense once they had some experience upon which to assess information and advice gained from these sources. Fiona described it this way:

> Or I didn't see it when I, the first time around…it was all going to be blissful and wonderful. So the second time, just talking to other people, and finding, um, comfort in how honest they would be in their … trials that they had. Sometimes, I don't know if it's pride or what, but some people [would say], 'Oh, no, it's perfect," and "The kid always slept through the night, and everything was great." And then others would be very honest.

By the time subsequent babies were born, the women described social networks that had changed. Bonnie, for example, who was quite isolated when her first baby was born, appreciated the positive impact of having moved into a neighbourhood where there were other young families. She felt that the biggest difference between her unsuccessful experiences and the one that was successful was "more support, I believe, from friends and community, that was a big issue." She spoke of how friends with children understood just what a new mother might need, and brought over food or helped look after the older children:

> Oh, that was wonderful! [friends dropping off food] … Huge. Huge. That I could, that I didn't have to worry about some of the things, you know, around the house, and that type of thing. And I could feel like I could spend more time with the baby when I needed to…"

Gwen also had a stronger support network with her second baby, but her difficulties went beyond what her informal network could support. Nonetheless, she still found that talking with other mothers was helpful:

> And it was nice just talking to the other women [at the mother's group] and some troubles that they were having and that... That was really, really helpful. And then, again, my friend—same friend as last time, had a baby that was again four months older, so [we] would talk and it was just nice to talk about problems.

Positive social support networks have been linked with improved health (Hamilton & Bhatti, 1996) and are considered to be important during stressful life events, such as new parenthood (Cohen, Underwood, & Gottlieb, 2000). The women in the study identified the importance of support from family, friends, and peers as a factor in breastfeeding success. With their first babies, they did not realize that their social networks were not robust enough to meet the demands of new parenthood and when breastfeeding difficulties were encountered. By the time of the birth of subsequent babies, the women were generally more connected with their communities. They talked about attending mother's groups, where they met other mothers and made friends, and how, as a couple, their social network had expanded to include friends with children. They described how their increased experience as mothers, and with breastfeeding, gave them more confidence in their skills and choices, and how they were better able to assess breastfeeding information and suggestions from family members, friends, and health professionals. Many realized only subsequently that what they had been through was not out of the ordinary, and that they were not "losers" or inadequate mothers because they had problems.

Talking with other women helped them to normalize their experiences, and to recognize the potential challenges and uncertainties of the early days and weeks of motherhood. All of these factors helped the women to moderate their expectations of the early days and weeks after the birth of subsequent babies, when they were establishing breastfeeding. The contacts they made with experienced mothers also helped to expand the parents' social network beyond family and friends to include experienced parents, and breastfeeding role models.

Formal peer support programs have been shown to be effective in extending breastfeeding duration and appear to be an important adjunct to the provision of professional support (Dennis, et al., 2002; Martens, 2002). They may be one means of helping new mothers connect with another breastfeeding mother in the community and having a peer who can help to provide a listening ear as well as provide practical breastfeeding help. This kind of support may help new mothers moderate their expectations, discussed in greater detail below, as well as improve duration rates.

Expectations and Experience

The women in the study described how their expectations of breastfeeding and being a mother changed after their unsuccessful breastfeeding experiences. They described expectations with their first babies of how their baby would respond to breastfeeding and what breastfeeding would be like. They compared themselves to others. Several women, like Fiona, described having family members or friends who had had what they thought were uneventful breastfeeding experiences. Fiona described her sister's experience as "a cakewalk [for her], get latched on, 20 minutes, boom, bang, kid's asleep!" The women acknowledged just how difficult it can be to prepare for the first birth and breastfeeding experience. Several women spoke of how breastfeeding was more difficult than they had expected. Elaine said she had found that it was

> a huge deal [breastfeeding] and you just assume that it's—I mean, and I've read—I'[d] read before that that, yeah, this might not be easy – like. . . it doesn't always come naturally, but you still aren't as prepared for what it—the work that it takes, you know.

For Fiona, only in looking back did she realize how little prepared she was to breastfeed and to care for a newborn:

> You don't know what you're doing, you don't know why he's crying, or, is it the food? Is it the, whatever, is he starving? Do I not have enough milk, is that why

> he's crying? I mean, I *read*, I *thought* I was prepared, but, I don't know how you prepare for the first one. . . Because I had *no* idea...

By Elaine's second baby, she had realized how important it was to look after herself by eating regularly and napping. As well, she also described how she had changed her expectations about making breastfeeding a priority:

> I—I guess I'm more—I was willing to stay at home more if I had to, no matter what—like breastfeeding was definitely more of a—well, I—it was a huge priority—I don't know if it wouldn't have been the first time, but I didn't realize it was going to have to be—that's the other thing I tell [other] mothers now... Like, it's everything—and I did not realize that, and prenatal [classes] didn't prepare us for that—that breastfeeding is basically number one, you know. And then that things work around it, but that is your key—that has to be your focus from the first—until things get, you know, worked out. Yeah, I was totally shocked [the first time] that it was that huge.

Debbie said she had expected the baby to know what to do, but by the second birth, she understood that "all the baby knows how to do is suck. You've got to do everything else [to help the baby get latched correctly]." Brenda talked about having blinders on and being shy about discussing breastfeeding:

> Maybe it was there the first time [information about breastfeeding perhaps being difficult] but I sort of had these blinders on and no, we don't discuss it because it's breasts, you know.

She also described mothers she had seen in stores who could just "lift up their shirt and the kid latches on and they carry on" and how she expected to be able to do the same:

> It wasn't like that—I mean, it took—sometimes with our first, it would take me 20 minutes for a good latch and I thought "Oh, this is awful," you know. [I didn't realize at the time that those were probably] older babies and they had probably had the same experience [in the early weeks] but there's nowhere in the literature—although now, the stuff I read for [the second pregnancy] was certainly a lot more matter-of-fact and said 'Yeah, it looks easy, but it's not, but it's rewarding once you get it right', you know.

The women also spoke about how they had moderated expectations of themselves in terms of newborn behaviour. Beske and Garvis (1982) identified the baby as the most significant "encourager" for short-term, medium-term and long-term breastfeeding mothers and Lothian (1995) found that while support as well as knowledge and skill were important for breastfeeding mothers, these factors influenced duration only when the baby was satisfied.

Elaine described her uncertainty about what was happening and what to do about it when her first baby, who she described as "colicky," would fuss whenever she tried to nurse her:

> I'd put her . . . on and she'd [fuss and pull away]—and I still don't know whether it was—and I was reading on the Internet, too, and I don't know if I had too slow or too much milk coming out all at once—I don't—I still don't know what the problem was . . .

She described how her inexperience led to her wonder why the baby was crying and to turn to a bottle and formula when she did not feel confident in her milk supply:

> You know, 'cause I kept thinking "Is she hungry?" I think she was just colicky but, you know, you don't know, especially the first time mother. . . Yeah [there's so much going on] so to make them happier, you know, the bottle sometimes did seem to do it.

Many of the women described a shaky start to breastfeeding along with concerns about milk production—too little, too much—that often arose as a result of infant fussing and crying. A number of the women described being depressed and overwhelmed by the breastfeeding problems and the baby's crying or other signs of the baby's dissatisfaction. The crying also upset the fathers. Elaine described how her husband tried to solve the problem with whatever tools he was aware of:

> He was like me, you know, 'How do we—how do we make this baby happy, basically, you know? And if you want to breastfeed, fine, but if—if—if a bottle is going to make her quiet and happy, well we'll do that."

Crying created doubts and anxieties, and like Brenda, the women were quick to blame themselves and their milk. She described how her baby

> cried a lot and he was really colicky, so, of course, I blamed that on me and, you know he'd be screaming and I'm trying to get him latched and I'm crying and I'm thinking "Oh God, why—what is wrong?" you know, and—but there was nothing really out there that [could help]—he's just a colicky baby and it's not you and, even if there was, I don't think I would've bought it [the idea that it wasn't my fault], you know.

The women talked about trying different ways to alleviate crying. Debbie's baby, also described as colicky, "screamed her head off from about 7-7:30 at night until sometimes 'til three in the morning" from about three weeks on. She described how her mother and mother-in-law "kept telling me to stop breastfeeding—to go on formula—they said, 'It's probably your milk.'" She also tried cutting out various foods, but this did not help.

The way in which a baby responded to breastfeeding affected the confidence of some of the women. Elaine described her first baby as being very sensitive to sound and who didn't seem to "like to breastfeed anyway—like, she didn't like [being] that close—like she just wanted to be looking around, which [makes it] hard to breastfeed."

Barbara, however, felt that her first baby's personality (and longer times between feedings than she experienced with her second baby) was what enabled her to continue breastfeeding even when it was painful. She described him as a "*really* laid back baby and a *happy* baby [who] slept really well."

In contrast to how many of the women had described their first babies as being "colicky" or as crying excessively, only Barbara described her second baby this way and she viewed it in a positive way, as being a small price to pay for pain-free breastfeeding. The baby cried "*every* night from 7 to 10, like clockwork, at the top of his lungs for six months" but she thought it

> was really good. . .that I breastfed 'cause at least I could rule that out as being one of the things [causing the crying]. . . People kept saying, "Well maybe he's allergic to your breast milk"—I said, "I don't care, too bad [laugh]—he's just colicky, he's happy all day."

Other women described crying, but in ways that indicated that it was less of a problem than the first time. Brenda described how with her second baby, "when he cries, he really cries but, you know, I usually know why." Debbie, comparing babies, said that with her second baby she didn't feel as "stressed out [as with the first baby] because, I mean, he doesn't cry for no reason, and I'm not always just catering to his needs" and that he only cried

> when there's something that he wants or needs—like he's got a poopy diaper or he doesn't want to be in his car seat, or he wants to be cuddled or—I mean, he doesn't just scream for no reason, like his sister.

The mothers in the study appeared to be able to understand infant behaviour better by the birth of their second baby and were perhaps more able to breastfeed and care for these babies in a more responsive way. New parents are frequently concerned about "spoiling" their baby. Small (1998) says that

> Today we know that what was once thought indulgent is better viewed as what is needed by the baby and part of the natural course of events. An infant and its primary caretaker are intimately entwined. The baby is communicating 'intent' when it cries or gurgles, providing information about its state. It is not calling for attention, at least not in a negative way. The baby is merely communicating and asking for engagement; it is initiating a dialog (p. 175).

Health care providers and peers can help to moderate concerns and help new mothers more readily "tune into" their babies and be responsive to feeding and caregiving cues. Lothian (1995) recommended that

> breastfeeding education should include much more information on the contribution of the baby to the process of breastfeeding. Health care providers

> should be skilled in both infant breastfeeding assessment and interventions to facilitate successful breastfeeding (p. 328).

Small (1998), looking at breastfeeding and caregiving from an anthropological viewpoint, described how the breastfeeding and nurturing patterns that are common in Western societies (for example, scheduled feedings and the avoidance of nighttime feedings) may contribute to perceptions of low milk supply, increased infant crying, and therefore to low maternal confidence. Some of the women in the study talked about enjoying nighttime feedings during their successful breastfeeding experiences. They appeared to be talking about a more responsive, flexible breastfeeding style that may have contributed to their success by decreasing crying, increasing their milk supply, and meeting their infant's needs for frequent feedings.

As Sarah discovered, however, a responsive style of breastfeeding may not be sufficient when a baby is distressed and crying excessively. Her experience points to the importance of health care providers paying attention to maternal reports of infant crying and distress. As Sarah described, she needed a systematic approach to identify what was causing the problem:

> I needed somebody to sit down with me and help me figure out what was going on because . . . [now when I hear] about crying babies and unsettledness, I ha[ve] *questions* to ask . . . specific questions – 'What is the—what does it look like on a 24-hour period, what does it look like on a 40 [hour], on a week, 2 week cycle?,' trying to pick out growth spurts and all of that jazz, right?

She also identified that it may have been helpful if she had been referred to a dietitian to help determine whether foods that she was eating were causing her baby distress. She had heard a dietitian talking to a client about "Let's try *this* for a week and see what happens" and thought this approach may have been helpful for her. She also felt that if public health had been "obligated" to do follow-up visits in the second or third month, the depression might have been noticed.

The women also talked about changes they made before subsequent births as a result of their unsuccessful experience and subsequent reflection on what had happened. In addition to more reading and contact with experienced mothers, Bonnie described she "went into it [the birth and breastfeeding] … um, I guess, for lack of a better word, I was just mentally … I was *so* determined that it was going to be different, that it was." Linda acknowledged that she had been through a kind of "mental process" between births and talked about how she wanted things "different." She made decisions about what kind of birth she wanted and described strengthened resolve to breastfeed, saying she had developed an "incredibly strong commitment." She had a prenatal consultation with a lactation consultant, attended La Leche League meetings, and hired a doula to provide labour support.

The women were asked to describe how they talk about breastfeeding with other mothers as a result of their experiences, and what they would have appreciated knowing prior to or during their unsuccessful experiences. Many of the women stated that they had become breastfeeding advocates as a result of their experiences. They encouraged prospective mothers to breastfeed and said that to help other women have success with breastfeeding they let them know that breastfeeding might not be as easy as they might imagine and direct them toward sources of information and support. Fiona described how her unsuccessful experience and her pride in her subsequent successful experience

> made me, um, reach out to mums a lot more … Particularly first-time mums who are going to start nursing. Not just strangers, but people who I know. [I say] 'OK, it's, it's not all perfect, so be ready for the sore nipples, and don't give up, necessarily. Call me if you get those sore nipples, whatever.' To let them know I've been there. And, I think that would have made such a difference my first time round. I know it would have.

Debbie said that "now . . . when I meet women that are kind of struggling with it, I try to, you know, say 'You can do this.'" Barbara felt that she had

> been of significant help to other people now—you know, I'm not a La Leche League kind of person and I'm not a touchy [feely kind of person] … but anybody that I've said, you know, here's—here's the person you need to call, here's the places you need to go and that, you know, so—I think it's a learning thing, you know, it's like any other skill, but people don't *get* that, you know.

If I had interviewed only women with an unsuccessful breastfeeding experience and then a successful one, it would have been very easy to conclude that experience was the common and perhaps decisive factor involved in breastfeeding success. Experience was an important factor, but not the only one, as illustrated by Sarah's and Gwen's second experiences. When they encountered major challenges, the confidence and skills that they brought from their first experiences appeared to be insufficient to help them cope with these challenges. Both acknowledged that, in retrospect, luck had been a factor in their success the first time. Gwen recognized that having a baby who fed well had contributed to the success with her first experience. She concluded: "[E]very child is individual and the fact that I just got lucky and she [the first baby] was a good feeder—so

I say 'luck.'" Sarah's first baby had also been a good feeder, "a natural" as she described it, in contrast to her experience with the second baby.

The women in the study also described how their attitudes towards other mothers had changed as a result of their unsuccessful experiences. Most said they were more tolerant, more accepting of women who stopped breastfeeding. Gwen recognized that, before her second, unsuccessful experience, she had been judgmental about women who had given up on breastfeeding. She described feeling that women were taking the "easy way out" when they stopped breastfeeding, and that she felt "really annoyed [with women who did not breastfeed] that they never gave it a chance." She remembered thinking "this is for your baby, you should try and give it a chance." As a result of her unsuccessful second experience, however, her "views [had] changed" and she now felt that deciding whether to breastfeed, and whether to stop, was

> very personal—like some women just can't handle that kind of experience. I can understand that—that's, you know, it's unfortunate, but if you're really feel[ing] that strongly about it, how is that going to be a good experience for you and your child if . . . the whole time you're feeling awful about it?

Not all the women had become more tolerant, however. While Linda also recognized that breastfeeding was "a personal thing," she seemed to have become more judgmental and less tolerant as a result of her own efforts to achieve a successful experience. She talked of now feeling that "every woman, to me, should try [to breastfeed]." She recognized that there could be extenuating circumstances in a woman's history, giving past sexual abuse as an example, but still she "believe[d] that breastfeeding can be accomplished by every woman, no matter what difficulties she's had—the births she's had."

In summary, the women in the study described expectations of new motherhood, of breastfeeding, and of infant behaviour that were not grounded in experience and were therefore perhaps unrealistic. Infant crying and worries about milk supply caused new parents great stress and often led to ineffective coping strategies. The women recognized the value of peer support and not only reached out to other women subsequent to their unsuccessful experience, but became advocates and reached out to prospective and new mothers to offer them support. As well, with one exception, they described how they had become more tolerant of other women's experiences and recognized that each breastfeeding experience was different.

Health care providers can assist prospective and new mothers to be more likely to have successful breastfeeding experiences in a number of ways. They can provide prospective and new mothers with opportunities to reflect on their knowledge and skills and on the degree of support they can expect from their social network. As well, health care providers can help prospective and new mothers to moderate their expectations by ensuring they receive effective prenatal education and by helping them to connect with successful breastfeeding mothers before their babies are born.

Chapter 5: Conclusions and Recommendations

This study sought to understand how women in northern Alberta described breastfeeding success and what they identified as having contributed to or inhibited their achievement of a successful breastfeeding experience. The women defined "breastfeeding success" in individual ways and tailored their experience to fit their needs. They identified a harmonious relationship that involved maternal and infant satisfaction as indicators of breastfeeding success. Maternal satisfaction and infant satisfaction were intertwined—a satisfied mother was one who could breastfeed without pain and whose baby breastfed well and gained weight. When a woman was satisfied, the experience was likely meeting her expectations and goals. Lifestyle compatibility appeared to be less important for the first-time mothers than Leff, et al. (1994) found. With subsequent babies, it appeared to be even less important, as the mothers adapted their lifestyle around breastfeeding.

The similarities among findings from four different studies and four different contexts—a New England urban area (Leff, et al., 1994), two urban Australian centres (Hauck & Reinbold, 1996; Schmied & Barclay (1999), and a rural and remote setting in northern Alberta, Canada—suggest that the common indicators of breastfeeding success for women in Western countries are maternal satisfaction and infant satisfaction. Maternal satisfaction may be linked with meeting the mother's own expectations and personal goals about breastfeeding and mothering more broadly. Infant satisfaction may be linked with weight gain and the mother's perception that the baby enjoys breastfeeding, is content, and is adequately nourished. These factors, when present, support feelings of accomplishment in the breastfeeding and mothering relationship, while the lack of any or all of these factors may explain the acute distress that frequently accompanies women's unsuccessful breastfeeding experiences.

This study identified a clear discrepancy between the women's relational focus on mother-infant satisfaction and the focus on exclusivity and duration as measures of success found in current policy recommendations. In general, it appears that women will continue to breastfeed if they are satisfied with the experience and if they believe their babies are satisfied. While some women are able to continue breastfeeding despite dissatisfaction with some aspects of the experience, their perception that their infant is satisfied is crucial to continued breastfeeding. Notably, the women in this study described uncertainty about whether or not their experiences might be considered successful when compared with what they assumed to be other women's experiences or when judged against policy recommendations.

Implications for Practice

This study's results confirm that assisting first-time mothers to successfully breastfeed is a complex task, but one that has extremely important health implications for both mother and baby. There is a societal expectation in Canada that mothers will at least try to breastfeed. This study confirmed that conditions need to be established that will maximize the chances of breastfeeding success, particularly with a first experience.

Preparing for Success: Breastfeeding Education and Support

The way in which the women in the study described themselves as not understanding information that was presented when they were pregnant has implications for how prenatal education is designed and delivered. It is challenging to engage prospective parents in discussions about breastfeeding that goes much beyond the benefits when they are focussed on the birth. As Minchin (1998) noted, "For many women, the child is not real until after the birth, and to concentrate on details of feeding is largely a waste of time" (p. 48-49). It is possible however, that educators have not used effective teaching methods to engage prospective parents. As this study indicates, prospective parents need the opportunity to reflect on their expectations, to develop skills and knowledge, and to assess their support network for what it can reasonably offer. Where support is found to be lacking, programs need to be available to help women connect with other mothers. Prenatal breastfeeding education could be improved by augmenting the content to include practical guidance and contact with experienced parents, as suggested by Schmied and colleagues (2001).

Adult education theory also provides guidance to practitioners who wish to improve prenatal education in small group and individual counselling situations. Vella (2001, 2002) has written compellingly and practically about the role of dialogue in adult education, the importance of learning needs assessments, active learning, building on experiential knowledge, and the value of reflection in learning. These methods may help to engage prospective parents in thinking about their expectations, which was identified in this study as critical to breastfeeding success.

Breastfeeding education may occur, and should occur, in a variety of ways and be provided by a variety of sources. This study and others (e.g., Hoddinott & Pill, 2000) show that providing information alone is insufficient. There is also a need for skillful and empathic care, particularly in the immediate postpartum and for skillful professional follow-up. The descriptions in this study of the type of education provided by professional sources, however, suggests concerns about accessibility, appropriateness, and acceptability that merit attention.

As noted earlier, physicians are in an ideal position to provide their pregnant patients with breastfeeding education. Each woman should receive a thorough breast and nipple assessment and have time to have her concerns addressed and questions answered. Physicians need to help to connect their patients with local resources and to direct them to good quality breastfeeding information. Unfortunately, in rural or remote practices, physicians are frequently overloaded with regular patient needs and some may prefer not to be involved in this level of care. In order to meet the prenatal education needs of their pregnant patients, physician groups may want to consider adding a lactation specialist to their practice who can do the assessments, education and follow-up that good quality practice requires.

The women in this study were proactive in trying to learn about breastfeeding and in seeking support. Other women may not be as proactive and need to have services readily available to them. Nearly 20 years ago, Cronenwett and Reinhardt (1987) posed a series of provocative questions with respect to support, confidence, and breastfeeding duration:

> Does access to information, support, and friends who are breastfeeding help women develop greater confidence in their ability to do so, with a greater likelihood that they will not only choose to breastfeed but continue the practice longer? Or will women who are motivated and competent to engage in the complex reciprocal exchange with their infants that breastfeeding represents be likely to seek out and obtain more information and support so that they are more

> confident in breastfeeding and do so longer? The underlying issue is this: Does the mother's competence in establishing relationships determine her confidence, her ability to seek information, and her likelihood of breastfeeding successfully, or is the determinant external to her, for example, in the amount of support available? (p. 200)

In other words, it may not be enough for supports simply to be available. Ways need to be found to ensure that all new mothers, regardless of their skills in relationship-building, are offered support that is appropriate to their needs and acceptable to them. Further investigation is required, including the use of appropriate theory, to build effective programs that provide the kind of support, in all forms, informal and professional, that each prospective and new mother requires for breastfeeding success.

In addition to professional support, the social networks of prospective mothers may need to be assessed, and where necessary improved through education of fathers and grandmothers. As well, new social ties with experienced breastfeeding mothers may need to be formed. The mothers in this study identified support or a lack of support, as a key factor in their ability to achieve a successful breastfeeding experience. In order to improve practice in this area, new parents need to have access to a range of resources that will provide emotional, appraisal, informational, and instrumental forms of support (House, 1986).

In planning breastfeeding intervention strategies, practitioners need to be aware that there is no "one size fits all" kind of support network intervention and that, as Heaney and Israel (2002) argue, programs must be

> tailored to the needs and resources of the participants. Thus, establishing participatory assessment processes during which participants describe the strengths and weaknesses of their support networks will help structure programs to be optimally effective (p. 205).

Within health promotion literature, there is an awareness of the importance of engaging people in the processes of identifying issues and designing effective interventions. Minkler and Wallerstein (1997) describe the use of structured dialogue (which includes examining both threats and coping) with listening and action. Practitioners who wish to design and implement effective breastfeeding promotion strategies, particularly for underserved groups such as Aboriginal or low-income women, need to remain aware of ways to involve the potential target group in the identification of issues relating to their support needs prior to the development of a program. Health care providers can ensure that prospective parents consider the need for social support as a foundation for breastfeeding success and help new parents identify ways to augment their support networks prior to a baby's birth. Losch, Dungy, Russell, and Dusdieker (1995) emphasized the importance of "the provision of active support for breast-feeding throughout the pregnancy, perinatal, and postnatal period." They stated, "it is not sufficient for these programs to target only the mother or potential mother; members of a woman's social network must be considered as information targets" (p. 6, electronic version). Programs that take note of racial and ethnic group programs are also recommended, so that the individuals most likely to influence decisions are included.

Program planners and practitioners must also be aware of the potential for inadvertently increasing pressure on women to breastfeed or adding to distress by pressuring them to continue (Schmied, et al., 2001). Practitioners must guard against providing programs or support that are breastfeeding-centred (Hoddinott and Pill, 2000), where the mechanical or biological aspects of the physical act of breastfeeding become more important than the mother-infant relationship. Rather, programs should offer non-judgmental and flexible services that are provided by health care providers and community-based individuals and groups, and are delivered in a manner that is timely, appropriate, and accessible for women.

Using Theory to Develop Breastfeeding Interventions

Effective programming for increased or enhanced breastfeeding support services offered by health promotion practitioners or health care providers should be based on theory and research. The Theory of Planned Behaviour (TPB) (Montano & Kasprzyk, 2002) has been extensively applied to test and predict breastfeeding behaviours (Janke, 1994; Martens & Young, 1997; Wambach, 1997; Avery, Duckett, Dodgson, Savik, & Henly, 1998; Duckett, et al., 1998). Martens (2002) described the effective use of theory and research to build a community-based breastfeeding promotion program in Manitoba. One of the communities involved in the study developed a long-term strategy for breastfeeding promotion as a result of the research. The strategy addressed each of the constructs of the Breastfeeding Decision-making Model (BDM): breastfeeding beliefs (knowledge about the benefits of breastfeeding), breastfeeding confidence (confidence in one's ability to breastfeed in different circumstances), and referent support (a measure of breastfeeding social support) (Martens & Young, 1997).

Social Cognitive Theory (SCT), in particular the construct of self-efficacy, shows promise for breastfeeding promotion and support. Self-efficacy "is the confidence that a person feels about performing a particular activity; including confidence in overcoming the barriers to performing that behavior" (Baranowski, Perry, & Parcel, 2002, p. 173). With experience often comes increased belief in "one's ability to perform the behaviors necessary to exert control (that is, self-efficacy)" (Wenzel, Glanz, & Lerman, 2002, p. 216). Dennis and Faux (1999) measured maternal confidence using the self-efficacy construct and correlated self-efficacy scores with breastfeeding patterns at six weeks postpartum. That self-efficacy increases with experience and practice was confirmed by the women in this study, who were able to take what they had learned with their unsuccessful experience and use it to help them to be successful. From this and previous research it can be concluded that ways must be found to help prospective mothers develop self-efficacy prior to the birth of their babies and in the early weeks of establishing breastfeeding and taking on new parenting. The clinical implementation of the Breastfeeding Self-Efficacy Scale (Dennis, 2003) provides questions for new mothers and a scale by which to assess their need for education or support.

Implementing Initiatives to Improve Breastfeeding Outcomes

It is well-established that breastfeeding is far too important to the future health of mothers and babies not to be given high priority, even in small hospitals with staff who are not specialized, or in health regions with geographical challenges for service delivery. Two initiatives are already available in Canada: the WHO/UNICEF Baby-Friendly™ Hospital Initiative and the Breastfeeding Committee for Canada's Baby-Friendly™ Initiative in Community Health Services. In addition, Health Canada's *Family-Centred Maternity Care* (2000) provides guidelines to improve maternity practices and health system services from conception to weaning.

The 1996 Mother-Friendly Childbirth Initiative (Hotelling, 2004) is modelled on the Baby-Friendly™ Hospital Initiative, with ten steps that facilities that provide maternity care can use to improve birth outcomes and provide less expensive care. One of the steps is specifically directed to the care for women who wish to breastfeed.

These four sets of guidelines contain explicit guidelines directed towards coordinated, evidence-based, and effective systems of prenatal, birth, postpartum, and community support that approaches service and support during the childbearing year and beyond in a holistic, biologically appropriate, and integrated manner. The implementation of maternity care and postpartum follow-up that is consistent with these guidelines would begin to address the support needs identified by the women in this study and in the literature. The likely end result would be improved breastfeeding outcomes due to increased professional and community support for breastfeeding mothers and babies and increased satisfaction with the breastfeeding experience.

There is also the need, however, to consider the caution raised by Schmied and colleagues (2001) for health professionals to "recognize the potentially coercive nature of breast-feeding policies" (p. 50). Practitioners must ensure that they work with mothers in ways that are compassionate, flexible, and without judgment, rather than in ways that "emphasise biology and baby and ignore the woman and her own psychological and social comfort and confidence as central to breast feeding" (p. 52).

Implications for Future Research

Defining Success

As mentioned earlier, an unexpected finding of this study was the reports of women who identified their breastfeeding experiences as not being successful when compared with what they perceived to be the judgment of other breastfeeding mothers or of experts who focus on duration and exclusivity. This requires further investigation.

Effective Prenatal and Postpartum Education and Counselling

There was little research identified that looked at how adult education principles and the use of dialogue might affect the effectiveness of approaches to prenatal education and counseling. This seems a promising area of future research.

Peer Support

Peer support may be provided in a variety of ways. The model of community-based volunteers or paid peer counsellors in a program run by professionals has received evaluation and confirmation of its effectiveness (Dennis, 2002; Martens, 2003). The model offered by La Leche League, which involves group education and dialogue in combination with telephone support, has not been evaluated in a North American setting and would benefit from such an evaluation.

Providing Breastfeeding Service in Small Centres

Most breastfeeding research in Canada and elsewhere has been conducted in urban centres. Further research on the development and delivery of effective lactation services in small and rural health care centres and communities would be of use to practitioners and policy-makers.

Study Limitations

As with all research, there were limitations to the study. These are discussed below in terms of how they may have influenced the outcome of the study.

Participant Selection

Study participants were self-selected based on their availability and interest in the subject. This way of including participants may have meant that they could have brought a unique perspective not found in the general population of breastfeeding women, or the study may have attracted more articulate women or those who felt they had dramatic stories to relate. Given the similarities of this study's findings with findings from other studies, these potential limitations do not appear to have impacted the study results.

Eligible study participants needed to be over 18 and English-speaking and therefore the perspectives of non-English speaking and teen mothers were excluded. This is no way diminishes the importance or relevance of the stories of excluded women, but does point to areas for further research to examine how the perspectives of younger or non-English speaking mothers are similar or different from those expressed by the women in this study.

The small sample facilitated an in-depth exploration of individual experiences, but may have excluded some valuable points of view. This is an acknowledged limitation of qualitative research methods. One of the strengths of the study is the inclusion of women for whom the breastfeeding experience sequence of success was reversed. These cases served to help confirm or disconfirm findings from the interviews and offered the opportunity to more deeply examine preconceptions about successful and unsuccessful breastfeeding experiences. Another strength is that the addition of a focus group in another community gave both a fresh look at preliminary findings, provided a small comparison between community perspectives, and allowed participants the opportunity to discuss ideas in a group setting, which is different than a one-to-one interview.

Study Context

The study was conducted in a rural and relatively remote part of Alberta, which may lead to results that are unique to this context. The study results as presented in this chapter, however, are consistent in many ways with other studies in other contexts. This indicates the likelihood that the issues identified by the women in this study are not unique to the context, although some variations may well be context-specific.

Conclusion

A number of key messages arise from this study. The first is that achieving successful breastfeeding is very important to women. In order to help them reach their goals and aspirations, there is a need for more effective prenatal education related to breastfeeding. More effective care needs to be organized around breastfeeding knowledge acquisition in the early days after the birth, followed by early and regular follow-up from birth until breastfeeding is well-established. First-time mothers, in particular, need support so that their babies are not denied the benefits of breastfeeding because of the inexperienced mother's need to develop new skills or because she lacks adequate support. As the two women in the study whose second breastfeeding experiences were unsuccessful indicated, health care providers cannot assume that second-time breastfeeding mothers will not have difficulty. They may require the same degree of skilled education and support if complex breastfeeding difficulties arise or if the mother is finding the new baby's temperament to be challenging.

The way in which women define breastfeeding success is individual and hinges a great deal on their satisfaction with the process, and their perceptions of their infant's satisfaction. Program planning and effective counselling require an understanding of this and the flexibility to work with women in a variety of ways, without judgment. Women are far more likely to reach policy goals for breastfeeding exclusivity and duration if they not only understand why the goals are important, but also are given the information, education, and support they need to achieve a satisfying breastfeeding experience.

Maternal reports of infant crying and distress need to be taken seriously and investigated. Not only can crying lead to breastfeeding cessation, it may exacerbate postpartum depression, interfere with the healthy development of the maternal and infant bond, or create relationship problems between the mother and her partner or family. All of these may in turn lead to early breastfeeding cessation or a dissatisfying breastfeeding experience.

Breastfeeding is often seen as a lifestyle choice rather than the important health promotion and women's health issue that it is. Promoting the benefits of breastfeeding without also ensuring that women have excellent prenatal and postpartum education and support is unfair to women, their babies, and their families. Health care providers and decision-makers need to be aware of how much success with breastfeeding depends upon skilled health care, particularly the provision of adequate prenatal preparation as well as empathic and skillful support during the early days and weeks after the baby is born. This requires the commitment of funding for training and adequate staffing in acute care facilities and in public health services. It may also require physicians to examine ways to provide breastfeeding education and support within their practice.

Just as "It takes a community to raise a child," this study made it clear that it also takes a community to help mothers to successfully breastfeed, not just the efforts of individual women. With the use of health promotion theory and methods to assess needs, and to plan and evaluate breastfeeding promotion and support programs, more women should have an opportunity for success with breastfeeding, with the long-term outcome of better health for women and children.

References

Academy of Breastfeeding Medicine, T. (1999). Guidelines for glucose monitoring and treatment of hypoglycemia in term breastfed neonates: Clinical protocol Number 1. Retrieved June 10, 2004, from http://www.bfmed.org.

Alberta Health and Wellness (2003). Alberta Reproductive Health: Pregnancy outcomes 2002. Retrieved May 17, 2004 from http://www.health.gov.ab.ca/resources/publications/pdf/reproductive02.pdf.

Australian Commonwealth Department of Health and Aged Care (2001). National breastfeeding strategy summary report. Retrieved July 17, 2004 from http://www.health.gov.au/pubhlth/publicat/document/brfeed/stratfeed.pdf.

Avery, M., Duckett, L., Dodgson, J., Savik, K., & Henly, S. J. (1998). Factors associated with very early weaning among primiparas intending to breastfeed. *Maternal and Child Health Journal, 2,* 167-179.

Baranowski, T., Perry, C. L., & Parcel, G. S. (2002). How individuals, environments, and health behavior interact. In K.Glanz, B. K. Rimer, & F. M. Lewis (Eds.), *Health behavior and health education* (3rd ed., pp. 165-184). San Francisco, CA: Jossey-Bass Publishers.

Beske, E. J. & Garvis, M. S. (1982). Important factors in breast-feeding success. *MCN. The American Journal of Maternal Child Nursing, 7,* 174-179.

Blyth, R., Creedy, D. K., Dennis, C. L., Moyle, W., Pratt, J., & De Vries, S. M. (2002). Effect of maternal confidence on breastfeeding duration: An application of breastfeeding self-efficacy theory. *Birth, 29,* 278-284.

Bocar, D. L. & Moore, K. (1987). Acquiring the parental role: A theoretical perspective. Auerbach, Kathleen G. [16]. Wayne, NJ, Avery Publishing Group Inc. Lactation Consultant Series. La Leche League International.

Breastfeeding Committee for Canada (1999). The Breastfeeding Committee for Canada welcomes you to the Baby-Friendly Initiative (BFI). Retrieved June 18, 2004 from http://www.breastfeedingcanada.ca/html/webdoc41.html.

Breastfeeding Committee for Canada (2002). Baby-Friendly Initiative in community health services: A Canadian implementation guide. Retrieved June 18, 2004 from http://www.breastfeedingcanada.ca/pdf/webdoc50.pdf.

Cadwell, K. & Turner-Maffei, C. (2004). *Case studies in breastfeeding*. Sudbury, MA: Jones and Barlett Publishers.

Cadwell, K., Turner-Maffei, C., O'Connor, B., & Blair, A. (2002). *Maternal and infant assessment for breastfeeding and human lactation: A guide for the practitioner*. Sudbury, MA: Jones and Barlett Publishers.

Canadian Paediatric Society, Dietitians of Canada, & Health Canada (1998). *Nutrition for healthy term infants* Ottawa, ON: Minister of Public Works & Government Services Canada.

Chen, A. & Rogan, W. J. (2004). Breastfeeding and the risk of postneonatal death in the United States. *Pediatrics, 113,* e435-e439.

Cohen, S., Underwood, L. G., & Gottlieb, B. H. (2000). *Social support measurement and intervention: A guide for health and social scientists*. New York: Oxford University Press.

Cooke, M., Sheehan, A., & Schmied, V. (2003). A description of the relationship between breastfeeding experiences, breastfeeding satisfaction, and weaning in the first 3 months after birth. *Journal of Human Lactation, 19(2):*145-156.

Coreil, J. & Murphy, J. E. (1988). Maternal commitment, lactation practices, and breastfeeding duration. *Journal of Obstetric, Gynecologic, and Neonatal Nursing, July/August,* 273-278.

Cronenwett, L. R. & Reinhardt, R. (1987). Support and breastfeeding: A review. *Birth, 14,* 199-203.

Dai, X. & Dennis, C. L. (2003). Translation and validation of the Breastfeeding Self-Efficacy Scale into Chinese. *Journal of Midwifery and Women's Health, 48,* 350-356.

Dennis, C. L. (1999). Theoretical underpinnings of breastfeeding confidence: a self-efficacy framework. *Journal of Human Lactation, 15,* 195-201.

Dennis, C. L. (2002). Breastfeeding initiation and duration: A 1990-2000 literature review. *Journal of Obstetric, Gynecologic, and Neonatal Nursing, 31,* 12-32.

Dennis, C. L. (2003). The breastfeeding self-efficacy scale: Psychometric assessment of the short form. *Journal of Obstetric, Gynecologic, and Neonatal Nursing, 32,* 734-744.

Dennis, C. L. & Faux, S. (1999). Development and psychometric testing of the Breastfeeding Self-Efficacy Scale. *Research in Nursing and Health, 22,* 399-409.

Dennis, C. L., Hodnett, E., Gallop, R., & Chalmers, B. (2002). The effect of peer support on breast-feeding duration among primiparous women: A randomized controlled trial. *Canadian Medical Association Journal,166,* 21-28.

Department of Health & Human Services (2000). *HHS Blueprint for Action on Breastfeeding* Washington, DC: U.S. Department of Health & Human Services.

Dewey, K. G. (2001). Maternal and fetal stress are associated with impaired lactogenesis in humans. *Journal of Nutrition, 13*(Suppl), 3012-3015.

Dick, M. J., Evans, M. L., Arthurs, J. B., Barnes, J. K., Caldwell, R. S., Hutchins, S. S. et al. (2002). Predicting early breastfeeding attrition. *Journal of Human Lactation, 18(1),* 21-28.

Drane, D. (1997). Breastfeeding and formula feeding: a preliminary economic analysis. *Breastfeeding Review, 5,* 7-15.

Duckett, L., Henly, S., Avery, M., Potter, S., Hills-Bonczyk, S., Hulden, R. et al. (1998). A theory of planned behavior-based structural model for breast-feeding. *Nursing Research, 47,* 325-336.

Dykes, F. & Williams, C. (1999). Falling by the wayside: a phenomenological exploration of perceived breast-milk inadequacy in lactating women. *Midwifery, 5,* 232-246.

Giugliani, E. R., Bronner, Y., Caiaffa, W. T., Vogelhut, J., Witter, F. R., & Perman, J. A. (1994). Are fathers prepared to encourage their partners to breast feed? A study about fathers' knowledge of breast feeding. *Acta Paediatrica, 83,* 1127-1131.

Hamilton, N. & Bhatti, T. (1996). *Population health promotion: An integrated model of population health and health promotion.* Ottawa, ON: Health Canada.

Hauck, Y. & Reinbold, J. (1996). Criteria for successful breastfeeding: mothers' perceptions. *Australian College of Midwives Incorporated Journal, 9,* 21-27.

Health Canada (2000). *Family-centred maternity and newborn care: National guidelines, 4th Edition.* Ottawa, ON: Health Canada.

Health Canada (2003a). *Canadian perinatal health report, 2003* Ottawa: Minister of Public Works and Government Services Canada.

Health Canada (2003b). Population Health Approach. Retrieved June 18, 2004 from http://www.hc-sc.gc.ca/hppb/phdd/.

Heaney, C. A. & Israel, B. A. (2002). Social networks and social support. In K.Glanz, B. K. Rimer, & F. M. Lewis (Eds.), *Health behavior and health education* (3rd ed., pp. 185-209). San Francisco, CA: Jossey-Bass Publishers.

Hoddinott, P. & Pill, R. (1999). Qualitative study of decisions about infant feeding among women in east end of London. *BMJ, 318,* 30-34.

Hoddinott, P. & Pill, R. (2000). A qualitative study of women's views about how health professionals communicate about infant feeding. *Health Expectations,* 3, 224-233.

Hogan, S. E. (2001). Overcoming barriers to breastfeeding: Suggested breastfeeding promotion programs for communities in eastern Nova Scotia. *Canadian Journal of Public Health, 92,* 105-108.

Hong, T. M., Callister, L. C., & Schwartz, R. (2003). First time mothers' views of breastfeeding support from nurses. *MCN. The American Journal of Maternal Child Nursing, 28,* 10-15.

Hotelling, B. A. (2004). Is your perinatal practice mother-friendly? A strategy for improving maternity care. *Birth, 31,* 143-147.

House, J. S. (1986). Social support and the quality and quantity of life. In *Research on the Quality of Life* (pp. 253-269). Chicago: University of Michigan.

Ingram, J., Woolridge, M., & Greenwood, R. (2001). Breastfeeding: It is worth trying with the second baby. *Lancet, 358(9286),* 986-987.

International Lactation Consultant Association. (1992). Summary of the hazards of infant formula. Raleigh, NC, International Lactation Consultant Association.

International Lactation Consultant Association. (1998). Summary of the hazards of infant formula: Part 2. Raleigh, NC, International Lactation Consultant Association.

Janke, J. R. (1994). Development of the Breast-Feeding Attrition Prediction Tool. *Nursing Research, 43,* 100-104.

Kramer, M. S., Chalmers, B., Hodnett, E. D., Sevkovskaya, Z., Dzikovich, I., Shapiro, S. et al. (2001). Promotion of Breastfeeding Intervention Trial (PROBIT): A randomized trial in the Republic of Belarus. *JAMA: The Journal of the American Medical Association, 285,* 413-420.

Kroeger, M. (2004). *Impact of birthing practices on breastfeeding: Protecting the mother and baby continuum*. Sudbury, MA: Jones and Barlett Publishers.

Leff, E. W., Gagne, M. P., & Jefferis, S. C. (1994). Maternal perceptions of successful breastfeeding. *Journal of Human Lactation, 10(2),* 99-104.

Leff, E. W., Jefferis, S. C., & Gagne, M. P. (1994). The development of the Maternal Breastfeeding Evaluation Scale. *Journal of Human Lactation, 10(2),* 105-111.

León-Cava, N., Lutter, C., Ross, J., & Martin, L. (2002). Quantifying the benefits of breastfeeding: A summary of the evidence. Retrieved July 20, 2004 from http://www.paho.org/English/HPP/HPN/Benefits_of_BF.htm.

Losch, M., Dungy, C. I., Russell, D., & Dusdieker, L. B. (1995). Impact of attitudes on maternal decisions regarding infant feeding [Electronic version]. *Journal of Pediatrics, 126(4):* 507-514.

Lothian, J. A. (1995). It takes two to breastfeed. The baby's role in successful breastfeeding. *Journal of Nurse-Midwifery, 40,* 328-334.

Maclean, H. M. & Millar, W. (1999). Breastfeeding in Canada: A review and update. Ottawa, ON, Minister of Public Works & Government Services Canada.

Marshall, C. & Rossman, G. B. (1999). *Designing qualitative research*. (3rd ed.) Thousand Oaks, CA: Sage Publications, Inc.

Martens, P. J. (2002). Increasing breastfeeding initiation and duration at a community level: An evaluation of Sagkeeng First Nation's community health nurse and peer counselor programs. *Journal of Human Lactation, 18,* 236-246.

Martens, P. J. (2000). A risk indicator for early cessation of breastfeeding: Postpartum measures of satisfaction and reported breastfeeding problems. *Current Issues in Clinical Lactation, 2000,* 15-23.

Martens, P. J. & Young, T. K. (1997). Determinants of breastfeeding in four Canadian Ojibwa communities: A decision-making model. *American Journal of Human Biology, 9,* 579-593.

McCarter-Spaulding, D. E. & Kearney, M. H. (2001). Parenting self-efficacy and perception of insufficient breast milk. *Journal of Obstetric, Gynecologic, and Neonatal Nursing, 30,* 515-522.

McLeod, D., Pullon, S., & Cookson, T. (2002). Factors influencing continuation of breastfeeding in a cohort of women. *Journal of Human Lactation, 18(4),* 335-343.

Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook.* (2nd ed.) Thousand Oaks, CA: Sage Publications, Inc.

Minchin, M. (1998). *Breastfeeding matters*. (4th ed.) St. Kilda, Australia: Alma Publications.

Minkler, M. (1997). Community organizing among the elderly poor in San Francisco's Tenderloin District. In M.Minkler (Ed.), *Community organizing and community building for health* (pp. 244-258). New Brunswick, NJ: Rutgers University Press.

Montano, D. E. & Kasprzyk, D. (2002). The Theory of Reasoned Action and the Theory of Planned Behavior. In K.Glanz, B. K. Rimer, & F. M. Lewis (Eds.), *Health behavior and health education* (3rd ed., pp. 67-98). San Francisco, CA: Jossey-Bass Publishers.

Mozingo, J. N., Davis, M. W., Droppleman, P. G., & Merideth, A. (2000). "It wasn't working. " Women's experiences with short-term breastfeeding. *MCN. The American Journal of Maternal Child Nursing, 25,* 120-126.

National Health Service Department of Health (2002). Improvement, expansion and reform: The next 3 years. Priorities and planning framework 2003-2006. Retrieved June 18, 2004 from http://www.dh.gov.uk/assetRoot/04/07/02/02/04070202.pdf.

O'Campo, P., Faden, R. R., Gielen, A. C., & Wang, M. C. (1992). Prenatal factors associated with breastfeeding duration: Recommendations for prenatal interventions. *Birth, 19,* 195-201.

Palda, V. A., Guise, J. M., & Wathen, C. N. (2003). Interventions to promote breastfeeding: Updated recommendations from the Canadian Task Force on Preventive Health Care. Retrieved June 18, 2004 from http://www.ctfphc.org/.

Palmer, G. (1993). *The politics of breastfeeding*. (2nd ed.) Hammersmith, London: Pandora Press.

Papinczak, T. A. & Turner, C. T. (2000). An analysis of personal and social factors influencing initiation and duration of breastfeeding in a large Queensland maternity hospital. *Breastfeeding Review, 8(1),* 25-33.

Patton, M. Q. (2002). *Qualitative research and evaluation methods*. (3rd ed.) Thousand Oaks, CA: Sage Publications.

Pugin, E., Valdes, V., Labbok, M. H., Perez, A., & Aravena, R. (1996). Does prenatal breastfeeding skills group education increase the effectiveness of a comprehensive breastfeeding promotion program? *Journal of Human Lactation, 12(1),* 15-19.

Raj, V. K. & Plichta, S. B. (1998). The role of social support in breastfeeding promotion: A literature review. *Journal of Human Lactation, 14(1),* 41-45.

Riordan, J. M., Woodley, G., & Heaton, K. (1994). Testing validity and reliability of an instrument which measures maternal evaluation of breastfeeding. *Journal of Human Lactation, 10(4),* 231-235.

Riordan, J. (2005). *Breastfeeding and human lactation*. (3rd ed.) Sudbury, MA: Jones and Bartlett Publishers.

Schmied, V. & Barclay, L. (1999). Connection and pleasure, disruption and distress: Women's experience of breastfeeding. *Journal of Human Lactation, 15(4),* 325-334.

Schmied, V., Sheehan, A., & Barclay, L. (2001). Contemporary breast-feeding policy and practice: Implications for midwives. *Midwifery, 17(1),* 44-54.

Scott, J. A. & Binns, C. W. (1999). Factors associated with the initiation and duration of breastfeeding: A review of the literature. *Breastfeeding Review, 7(1),* 5-16.

Sheehan, D., Krueger, P., Watt, S., Sword, W., & Bridle, B. (2001). The Ontario Mother and Infant Survey: Breastfeeding outcomes. *Journal of Human Lactation, 17(3),* 211-219.

Sikorski, J., Renfrew, M. J., Pindoria, S., & Wade, A. (2002). Support for breastfeeding mothers (Cochrane Review). *Cochrane Database Systematic Review,* CD001141.

Small, M. F. (1998). *Our Babies, ourselves: How biology and culture shape the way we parent*. New York: Anchor Books.

Susin, L. R., Giugliani, E. R., Kummer, S. C., Maciel, M., Simon, C., & da Silveira, L. C. (1999). Does parental breastfeeding knowledge increase breastfeeding rates? *Birth, 26(3),* 149-156.

Thorne, S., Kirkham, S. R., & MacDonald-Emes, J. (1997). Interpretive description: A noncategorical qualitative alternative for developing nursing knowledge. *Research in Nursing & Health, 20,* 169-177.

Tiedje, L. B., Schiffman, R., Omar, M., Wright, J., Buzzitta, C., McCann, A. et al. (2002). An ecological approach to breastfeeding [Electronic version]. *MCN. The American Journal of Maternal Child Nursing, 27,* 154-161.

Tones, K. (2000). Conflict and compromise in health promotion research: A quest for illumination. Retrieved June 18, 2004 from http://www.rhpeo.org/ijhp-articles/e-proceedings/nordic97/2.htm.

Torres, M., Torres, R., Rodriguez, A., & Dennis, C. (2003). Translation and validation of the Breastfeeding Self-Efficacy Scale into Spanish: Data from a Puerto Rican population. *Journal of Human Lactation, 19,* 35-42.

Vella, J. (2001). *Taking learning to task: Creative strategies for teaching adults*. San Francisco: Jossey-Bass.

Vella, J. (2002). *Learning to listen, learning to teach: The power of dialogue in educating adults*. (2nd ed.) San Francisco: Jossey-Bass.

Wambach, K. A. (1997). Breastfeeding intention and outcome: A test of the Theory of Planned Behavior. *Research in Nursing and Health, 20,* 51-59.

Wenzel, L., Glanz, K., & Lerman, C. (2002). Stress, coping, and health behavior. In K.Glanz, B. K. Rimer, & F. M. Lewis (Eds.), *Health behavior and health education* (3rd ed., pp. 210-239). San Francisco, CA: Jossey-Bass Publishers.

Williams, P. L., Innis, S. M., Vogel, A. M., & Stephen, L. J. (1999). Factors influencing infant feeding practices of mothers in Vancouver. *Canadian Journal of Public Health, 90,* 114-119.

World Health Organization (2001). Infant and young child nutrition. Retrieved December 8, 2003 from http://www.who.int/gb/EB_WHA/PDF/WHA54/ea54r2.pdf.

World Health Organization, Health & Welfare Canada, & Canadian Public Health Association (1986). *Ottawa Charter for Health Promotion.*

World Health Organization & UNICEF (1991). Ten steps to successful breastfeeding. Retrieved June 18, 2004 from http://www.unicef.org/programme/breastfeeding/baby.htm#10.

Young, T. K., Martens, P. J., Taback, S. P., Sellers, E. A., Dean, H. J., Cheang, M. et al. (2002). Type 2 diabetes mellitus in children: prenatal and early infancy risk factors among native Canadians. *Archives of Pediatrics and Adolescent Medicine, 156,* 651-655.

Appendix A

Search Terms and Results

The following results are from searches in the PubMed database beginning in December 2002 with some updates in May 2003. Earlier searches were conducted in CINAHL. Many of the following search results had overlapping articles.

Initial search using the terms breastfeeding OR breast-feeding OR breast feeding (January 1, 1980 to December 30, 2002) resulted in 10,022 references.

Further searches using the following terms combined with the additional terms:

breastfeeding, breast-feeding, breast feeding

AND

duration January 1, 1980 to December 31, 2002: 1539 (23 reviewed); updated December 30/02 to December 31/03: 38 (none reviewed)

qualitative No limits: 132 (3 reviewed)

phenomenolog* No limits: 13 (3 reviewed)

ethnogr* No limits: 32 (2 reviewed)

grounded theory No limits: 11 (none reviewed)

health promotion: No limits. Search May 2003: 750 (search too broad; hand searches and references in journal articles used to identify relevant articles. 4 reviewed)

parity NOT breast cancer No limits: 640. Search too broad. Review articles identified and relevant studies reviewed.

confidence NOT "confidence interval" Publication Date from 1990/01/01 to 2002/12/30, only items with abstracts, English, Human: 114

theory: Keywords: 30

transtheoretical model: 2

health behaviour theory: 0

social support Publication Date from 1990/01/01 to 2002/12/30, only items with abstracts, English, Human: 50

peer support: 11 (all reviewed)

self-efficacy Publication Date from 1990/01/01 to 2002/12/30, only items with abstracts, English, Human: 8 (4 included)

confidence (January 1, 1990 to December 30, 2002):114. Updated January 2003, no limits: 221 (approximately 15 reviewed)

Appendix B
Recruitment Poster

Breastfeeding Mothers

Have you had a breastfeeding experience with a full-term healthy baby since 1997 that you would call “unsuccessful?” Did you then have another experience that was successful?

I would like to talk to you about these experiences
for a research project.
Please call me collect or send me an email:
Leslie Ayre-Jaschke
Graduate Student
University of Alberta
Centre for Health Promotion Studies
(780) 624-1656 (Peace River)

September 2003

Leslie 780-624-1656
leslieaj1949@yahoo.com
Leslie 780-624-1656
leslieaj1949@yahoo.com
Leslie 780-624-1656
leslieaj1949@yahoo.com
Leslie 780-624-1656
leslieaj1949@yahoo.com
Leslie 780-624-1656
leslieaj1949@yahoo.com
Leslie 780-624-1656
leslieaj1949@yahoo.com
Leslie 780-624-1656
leslieaj1949@yahoo.com
Leslie 780-624-1656
leslieaj1949@yahoo.com
Leslie 780-624-1656
leslieaj1949@yahoo.com
Leslie 780-624-1656
leslieaj1949@yahoo.com

Appendix C

Interview Guide

Preparing for Breastfeeding Success: Mothers' Perspectives on Learning from an Unsuccessful Experience

Thank you for agreeing to this interview. [Explain and sign U of A consent form.] The purpose of the study is to learn about how mothers with an unsuccessful breastfeeding experience then went on to have one that was successful.

You have signed the form indicating your understanding of the research study, including your consent for the interview and understanding that the interview will be tape-recorded. You are free to stop the interview at any time and/or request that the tape-recorder be turned off.

[Question added after pilot and first interview: When did you first decide to breastfeed?]

Now, I would like to hear about your breastfeeding experiences, starting with the one you describe as "unsuccessful."

1) Please tell me about your first experience, which you have said was "unsuccessful." [beginning with the birth].

2) How prepared for breastfeeding did you feel before this baby was born?

    a) Probe: What did you do to prepare? (E.g. reading, talking to other mothers).

    b) Probe: Did your doctor or another health professional (e.g., lactation consultant, nurse, midwife) talk to you about breastfeeding? How about your prenatal instructor?)

3) When you were pregnant, what was your impression from the people close to you (e.g, husband/partner, mother/mother-in-law, friends) about whether they thought breastfeeding was a good idea or not such a good idea?

4) Tell me about the first few weeks of breastfeeding—what do you remember about how you felt about it all, what you recall about the feedings, your emotions, and so on.

   a) Probe: Was there anything about breastfeeding that you were enjoying?

   b) Looking back, would you say there was anything about your baby's temperament or response to breastfeeding that may have influenced the relationship?

5) Did a breastfeeding group (e.g., La Leche League) play any part in this first experience? [Question not asked—already in the screening tool.]

   [Question added: How did you feel about feeding outside the home?]

6) At what point did you decide to stop breastfeeding? What led up to this decision?

   a) Probe: Do you recall worrying about whether the baby was getting enough milk?

   b) Probe: Did you look forward to feedings?

   c) Probe: Were you in pain? depressed? lonely?

   d) Probe: Did you return to work? If so, how supportive was your employer? Family?

   e) [Did anyone tell you about the WHO/CPS/Health Canada recommendations for length of exclusive breastfeeding, introduction of solids, length of breastfeeding?]

   f) [How did you feel about stopping?]

7) What do you recall telling other women about breastfeeding after this experience?

   a) Probe: Did you tell others about your difficulties?

   b) Probe: Did you ever tell others that you wouldn't want anyone to go through what you did?

8) After this experience, did you think about things that you might want to do differently with another baby?

   a) Probe: At any point did you decide not to breastfeed another baby? If so, when did you change your mind?

9) Overall, what would you say were the most important reasons why this breastfeeding experience was unsuccessful for you and your baby?

[What would you say is your definition of "unsuccessful" when talking about a breastfeeding experience? If you were to complete a sentence that starts, "To me, an unsuccessful breastfeeding experience is one that … or where …]

Now I'd like to go on to hearing about the experience you describe as "successful."

10) What differences did you notice between this experience and the earlier unsuccessful one? [including the birth experience]

   a) Probe: Did you do anything differently to learn about breastfeeding during this pregnancy? What did you do that made a difference?

   b) Probe: Were things any different with how people close to you thought about breastfeeding? How enthusiastic was your husband/partner or other people important to you about you trying to breastfeed this baby?

   c) Probe: Did a breastfeeding group (e.g., La Leche League) play any part in this first [second] experience?

   d) Probe: What did others do that helped you?

   e) Probe: What was this baby like to feed and care for compared to your earlier/first baby? Looking back, would you say there was anything about your baby's temperament or response to breastfeeding that may have influenced this relationship?

11) Tell me about the first few weeks of breastfeeding—what do you remember about how you felt about it all, what you recall about the feedings, your emotions, and so on.

   a) Probe: How different was this time than with the other experience?

12) What do you recall telling other women about breastfeeding as a result of this experience?

   a) Probe: If you were today talking with a woman who was pregnant with her first baby, what would you tell her were the most important things she could do to prepare for becoming a new mother and for breastfeeding?

13) Did you return to work? If so, how supportive was your employer? family?

14) Overall, what would you say were the most important reasons that this breastfeeding experience was successful? ? What helped make this experience successful?

a) Probe: If there were things that were not helpful, how did you respond or what did you do to overcome them?

[What would you say is your definition of "successful" when talking about a breastfeeding experience? If you were to complete a sentence that starts, "To me, a successful breastfeeding experience is one that … or where …]

15) Those are all the questions I have for you. Is there anything else you would like to add about either of your experiences, breastfeeding in general, or anything else related to this topic?

[Do you have any journal or baby book entries that you could share with me?]

Thank you very much for agreeing to talk to me today. Before we finish, I would just like to confirm that you agree to have your comments included in this study. Thank you again. If you have any questions or concerns that come up later, please give me a call.

Appendix D

Focus Group Discussion Guide

Thank you all very much for taking the time to come out to talk to me about your breastfeeding experiences. You both know me and know that I am doing this study as part of my MSc in Health Promotion.

The purpose of the study is to learn about mothers' experiences with unsuccessful and successful breastfeeding experiences. My hope is that by learning more from women who have had breastfeeding experiences that did not meet their expectations, better guidance and support for pregnant women and new mothers may be able to be provided in the future.

You have signed the form indicating your understanding of the research study, including your consent to participate in this discussion and understanding that I will tape the discussion and perhaps make notes. You are free to stop the interview at any time and/or request that the tape-recorder be turned off. [Explain and sign U of A consent form.]

Please remember that all discussion here tonight is confidential and that while you may want to discuss general aspects of the discussion, specifics should not be repeated outside this room.

1) When you think back on your two experiences, what would you say was the most interesting or important thing you learned about breastfeeding?

2) You have both had experiences that you've considered "unsuccessful" and "successful" experiences. How would you define success?

3) In the interviews I recently conducted, satisfaction with breastfeeding seemed to be very important when they defined a successful or unsuccessful experience. How would you say this fits with your experience?

4) What would you consider important factors in a satisfying breastfeeding experience? Probe: Mother factors? Baby factors?

5) Several of the mothers in my interviews identified infant weight gain as an important factor in whether they thought their experience was successful or not. How important would you say this was important to you?

6) None of the mothers I interviewed had had contact during their pregnancy with a breastfeeding class or a support group like La Leche League. How does this fit with your experience? Would you say it made any difference for any of your experiences?

7) None of the mothers attended a breastfeeding support group after their baby was born, although several attended a mother's drop-in group offered by public health. Few of the mothers in this group appeared to continue breastfeeding past a few months and several mothers commented on how there didn't seem to be an environment in their city where breastfeeding was valued or supported. Can you comment on your own experience here in [town]?

8) Many research studies have identified concerns about milk supply as an important factor in women stopping breastfeeding before they had intended, while other researchers think there is probably much more going on. How important would you say milk supply worries were in your first experience?

9) Women in the interviews [literature] identified feeling overwhelmed with the experience of motherhood/the responsibilities of being a mother with their first baby. Would you say this was a factor in your first experience? Your second experience?

10) Overall, what would you say were the most important lessons you learned that helped you have a successful breastfeeding experience with your second child?

11) Those are all the questions I have. Is there anything else you would like to add about either of your experiences, breastfeeding in general, or anything else related to this topic?

Thank you very much for taking the time to talk to me about your breastfeeding experiences. Your willingness to share your experiences may be helpful to other women in the future. If you have questions or concerns later on, please feel free to contact me.

Appendix E

Background Questionnaire

FOR RESEARCHER USE ONLY

Interview No. _______

Participant Alias/No. _________

Thank you for agreeing to speak with me about your breastfeeding experiences. To get some background on each interview (focus group) participant, I would appreciate it if you could fill out these questions before we do the interview (focus group).

1) What community do you live in? ____

2) How many children do you have? ____________

3) How much education do you have? (please check ✓)

   a) Some high school ____
   b) High school graduate ___
   c) Some college or university ____
   d) Degree ____ (which degree?) ____________________________________
   e) Diploma (college) ____ (which diploma?) __________________________
   f) Other (please describe) ____

4) Were you married or in a stable common-law relationship when your children were born?

   _____ Yes _____ No

5) **Baby A** (with whom you had an **unsuccessful** breastfeeding experience):

   a) Date of birth: __________
   b) Your age at the birth of this baby: _____________
   c) How long did you breastfeed this baby? _________________ (days, weeks, months)

d) Did you attend prenatal classes before Baby A's birth?

____ Yes Who conducted the class? ____ Hospital _____ Public Health ______ Private

_____ No

e) How was Baby A born? _____ Vaginal birth _____ caesarean birth

f) Where was Baby A born? _____ Hospital _____ Home _____ Other

g) Did you attend La Leche League or another breastfeeding support group **before** Baby A's birth?

_____ Yes In which town/city? ________________________________

____ No

h) Did you attend La Leche League or another breastfeeding support group **after** Baby A's birth?

_____ Yes In which town/city? ________________________________

____ No

i) Were you employed outside the home while you were breastfeeding this baby?

_____ Yes How many hours/week? ___________________

____ No

6) **Baby B** (with whom you had a **successful** breastfeeding experience):

a) Date of birth: __________

b) Your age at the birth of this baby: _____________

c) How long did you breastfeed this baby? __________________ (days, weeks, months)

d) Did you attend prenatal classes before Baby B's birth?

____ Yes Who conducted the class? ___ Hospital ___ Public Health ___ Private

_____ No

e) How was Baby B born? ___ Vaginal birth ___ caesarean birth

f) Where was Baby B born? ___ Hospital ___ Home ___ Other

g) Did you attend La Leche League or another breastfeeding support group **before** Baby B's birth?

_____ Yes In which town/city? ________________________________

____ No

h) Did you attend La Leche League or another breastfeeding support group **after** Baby B's birth?

_____ Yes In which town/city? ________________________________

____ No

i) Were you employed outside the home while you were breastfeeding this baby?

____ Yes How many hours/week? _________________

____ No

Thank you. I'm looking forward to talking you about your breastfeeding experiences. If you have questions about these questions, please call me at (780) 624-1656 or email: jaschke@telusplanet.net

Appendix F

Interview Information Letter and Consent Form

(printed on University of Alberta Centre for Health Promotion Studies letterhead)

Leslie Ayre-Jaschke
Peace River, AB
(780) 624-1656

[Date]

Dear :

As you know, I am doing a study called *Preparing for Breastfeeding Success: Mothers' Perspectives on Learning from an Unsuccessful Experience.* This study is in partial fulfillment of the requirements for an MSc in Health Promotion through the University of Alberta.

Dr. Kaysi Eastlick Kushner	Dr. Kate Caelli
Assistant Professor, Faculty of Nursing	Associate Professor, Faculty of Nursing
University of Alberta	University of Alberta
Assistant Director	Adjunct Research Fellow, School of Nursing
Canadian Institutes for Health Research	Curtin University of Technology
Institute of Gender and Health	Perth, Western Australia
Phone 780-492-3656	Phone 780-492 4742

STUDY PURPOSE: The purpose of the study is to learn from mothers who live in northern Alberta about how they moved from an unsuccessful breastfeeding experience to one that was successful. The results may help health care providers to better assist women to have a successful experience.

CONFIDENTIALITY: The questions I asked you on the phone helped me to decide whom to ask for an interview. I will keep that screening information and information received during the interview confidential, except when professional codes of ethics or the law requires reporting. I will keep all information you provide for at least five years after the study is done in a secure area (for example, in a locked filing cabinet). Your real name or any other identifying information will not be used or attached to your information in publications or presentations.

FURTHER STUDY: In the future, another researcher or I may want to look at the information that is gathered for this study to help answer other study questions. In this case, an ethics board will first review the proposed use of the information to ensure that it is used ethically.

THE INTERVIEW: The interview will last for about 1 ½ to 2 hours. We will meet at a time and location of your choice or at a private space I have available. If you have a baby in arms, please feel free to bring him/her to the interview. If you have childcare expenses, I can repay you.

(Please turn over)

I will want to tape the interview. At any time, however, you can stop the interview, ask to have the taping stopped, or ask that all or part of your interview not be used. There is no penalty for any of these requests. Once the interview is finished, I will send the tape to a typing service in Edmonton that provides confidential service. I will analyze all the interview transcripts. Other analysis will come from a group interview held in another community and from documents provided by study participants.

BENEFITS AND RISKS:

You may benefit from participating in this study by having the chance to share your personal experiences with someone who is interested. Your experience may add to what we know about how women prepare to have a successful breastfeeding experience. You might also increase your knowledge about yourself or your breastfeeding situation.

You will not be exposed to experiences that result in direct or indirect harm, but there is a small chance that discussing past experiences may be emotionally distressing. If you would like to discuss your experience more once the interview is over, please call me at the number above.

RESEARCH RESULTS:

I will make a summary of the final results of the study available to you, if you would like. As well, I may want to check with you about the analysis results. This will give you have a chance to say if I have included important information.

QUESTIONS:

If you have questions about how the study is being conducted, please contact either of my thesis supervisors at the numbers above.

Thank you.

Yours truly,

Leslie Ayre-Jaschke

________________ Participant initial

________________ Investigator initial

(printed on University of Alberta Centre for Health Promotion Studies letterhead)

CONSENT FORM
Interview

Title of Project: Preparing for Breastfeeding Success: Mothers' Perspectives on Learning from an Unsuccessful Experience

Principal Investigators: Dr. Kaysi Kushner/Dr. Kate Caelli

Please read each item and then circle your answer.

- Do you understand that you have been asked to be in a research study? Yes No
- Have you read and received a copy of the attached Information Sheet? Yes No
- Do you understand the benefits and risks involved in taking part in this research study?Yes No
- Have you had an opportunity to ask questions and discuss this study? Yes No
- Do you understand that you are free to refuse to participate or withdraw from the study at any time? You do not have to give a reason. Yes No
- Has the issue of confidentiality/anonymity been explained to you? Do you understand who will have access to your records? Yes No
- Do you agree to the use of the data for the purposes explained? Yes No
- Do you agree that the data may be used in future studies? Yes No

This study was explained to me by: *Leslie Ayre-Jaschke*

I agree to take part in this study.

Signature of Research Participant Date

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

Signature of Investigator or Designee Date

Appendix G

Group Interview (Focus Group) Information Letter and Consent Form

(printed on University of Alberta Centre for Health Promotion Studies letterhead)

Leslie Ayre-Jaschke
Peace River, AB
(780) 624-1656

[Date]

Dear :

As you know, I am doing a study called *Preparing for Breastfeeding Success: Mothers' Perspectives on Learning from an Unsuccessful Experience.* This study is in partial fulfillment of the requirements for an MSc in Health Promotion through the University of Alberta. My thesis supervisors are:

Dr. Kaysi Eastlick Kushner
Assistant Professor, Faculty of Nursing
University of Alberta
Assistant Director
Canadian Institutes for Health Research
Institute of Gender and Health
Phone 780-492-3656

Dr. Kate Caelli
Associate Professor, Faculty of Nursing
University of Alberta
Adjunct Research Fellow, School of Nursing
Curtin University of Technology
Perth, Western Australia
Phone 780-492 4742

STUDY PURPOSE: The purpose of the study is to learn from mothers who live in northern Alberta about how they moved from an unsuccessful breastfeeding experience to one that was successful. The results may help health care providers to better assist women to have a successful experience.

CONFIDENTIALITY: The questions I asked you on the phone helped me to decide whom to ask to participate in a group interview. I will keep that screening information and information received during the group interview confidential, except when professional codes of ethics or the law requires reporting. I will keep all information you provide for at least five years after the study is done in a secure area (for example, in a locked filing cabinet). Your real name or any other identifying information will not be used or attached to your information in publications or presentations.

FURTHER STUDY: In the future, another researcher or I may want to look at the information that is gathered for this study to help answer other study questions. In this case, an ethics board will first review the proposed use of the information to ensure that it is used ethically.

(Please turn over)

THE GROUP INTERVIEW (FOCUS GROUP): The group interview will last for about 1 ½ to 2 hours in a convenient location in Peace River. If you have a baby in arms, please feel free to bring him/her. If you have childcare expenses, I can repay you.

Before the group discussion begins, I will remind the group that what is said needs to remain confidential. If there is something you would not like to be discussed or known, please do not feel any pressure to share it with the group. You may decide not to participate in the discussion at any time without penalty.

I will facilitate the focus group and another person will make notes. I will type up the focus group notes and confirm their accuracy with the note-taker. This information will be analyzed with other information from individual interviews done in another community and from documents provided by study participants.

BENEFITS AND RISKS:
You may benefit from participating in this study by having the chance to share your personal experiences with someone who is interested. Your experience may add to what we know about how women prepare to have a successful breastfeeding experience. You might also increase your knowledge about yourself or your breastfeeding situation.

You will not be exposed to experiences that result in direct or indirect harm, but there is a small chance that discussing past experiences may be emotionally distressing. If you would like to discuss your experience more once the interview is over, please call me at the number above.

RESEARCH RESULTS:
I will make a summary of the final results of the study available to you, if you would like. As well, I may want to check with you about the analysis results. This will give you have a chance to say if I have included important information.

QUESTIONS:
If you have questions about how the study is being conducted, please contact my thesis supervisors at the numbers above.

Thank you.

Yours truly,

Leslie Ayre-Jaschke

________________ ________________

Participant initial Investigator initial

CONSENT FORM

Group Interview (Focus Group)

Title of Project: Preparing for Breastfeeding Success: Mothers' Perspectives on Learning from an Unsuccessful Experience

Principal Investigators: Dr. Kaysi Kushner/Dr. Kate Caelli

Please read each item and then circle your answer.

- Do you understand that you have been asked to be in a research study? Yes No
- Have you read and received a copy of the attached Information Sheet? Yes No
- Do you understand the benefits and risks involved in taking part in this research study?Yes No
- Have you had an opportunity to ask questions and discuss this study? Yes No
- Do you understand that you are free to refuse to participate or withdraw from the study at any time? You do not have to give a reason. Yes No
- Has the issue of confidentiality/anonymity been explained to you? Do you understand who will have access to your records? Yes No
- Do you agree to the use of the data for the purposes explained? Yes No
- Do you agree that the data may be used in future studies? Yes No

This study was explained to me by: *Leslie Ayre-Jaschke*

I agree to take part in this study.

Signature of Research Participant Date

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

Signature of Investigator or Designee Date

Appendix H
Document Information Letter and Consent Form
(printed on University of Alberta Centre for Health Promotion Studies letterhead)

Leslie Ayre-Jaschke
Peace River, AB
(780) 624-1656

[Date]

Dear :

As you know, I am doing a study called *Preparing for Breastfeeding Success: Mothers' Perspectives on Learning from an Unsuccessful Experience.* This study is in partial fulfillment of the requirements for an MSc in Health Promotion through the University of Alberta. My thesis supervisors are:

Dr. Kaysi Eastlick Kushner
Assistant Professor, Faculty of Nursing
University of Alberta
Assistant Director
Canadian Institutes for Health Research
Institute of Gender and Health
Phone 780-492-3656

Dr. Kate Caelli
Associate Professor, Faculty of Nursing
University of Alberta
Adjunct Research Fellow, School of Nursing
Curtin University of Technology
Perth, Western Australia
Phone 780-492 4742

STUDY PURPOSE: The purpose of the study is to learn from mothers who live in northern Alberta about how they moved from an unsuccessful breastfeeding experience to one that was successful. The results may help health care providers to better assist women to have a successful experience.

DOCUMENTS: Did you keep a baby book or diary while you were breastfeeding? If you are willing, please make photocopies of entries that you think relate best to either of your breastfeeding experiences and bring these when we meet.

CONFIDENTIALITY: I will keep information in your baby book or journal entries confidential, except when professional codes of ethics or the law requires reporting. I will keep all information you provide for at least five years after the study is done in a secure area (for example, in a locked filing cabinet). Your real name or any other identifying information will not be used or attached to your information in publications or presentations.

FURTHER STUDY: In the future, another researcher or I may want to look at the information that is gathered for this study to help answer other study questions. In this case, an ethics board will first review the proposed use of the information to ensure that it is used ethically.

(Please turn over)

QUESTIONS:
If you have questions about how the study is being conducted, please contact either of my thesis supervisors at the numbers above.

Thank you.

Yours truly,

Leslie Ayre-Jaschke

________________ Participant initial

________________ Investigator initial

(printed on University of Alberta Centre for Health Promotion Studies letterhead)

CONSENT FORM

Documents

Title of Project: Preparing for Breastfeeding Success: Mothers' Perspectives on Learning from an Unsuccessful Experience

Principal Investigators: Dr. Kaysi Kushner/Dr. Kate Caelli

Please read each item and then circle your answer.

• Do you understand that you have been asked to be in a research study?	Yes	No
• Have you read and received a copy of the attached Information Sheet?	Yes	No
• Do you understand the benefits and risks involved in taking part in this research study?	Yes	No
• Have you had an opportunity to ask questions and discuss this study?	Yes	No
• Do you understand that you are free to refuse to participate or withdraw from the study at any time? You do not have to give a reason.	Yes	No
• Has the issue of confidentiality/anonymity been explained to you? Do you understand who will have access to your records?	Yes	No
• Do you agree to the use of the data for the purposes explained?	Yes	No
• Do you agree that the data may be used in future studies?	Yes	No

This study was explained to me by: *Leslie Ayre-Jaschke*

I agree to take part in this study.

Signature of Research Participant ______________________ Date __________

____

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

Signature of Investigator or Designee ______________________ Date __________

Appendix I

Codes

Codes: Non-Specific to an Experience (15)	Codes: Successful Experience (40)	Codes: Unsuccessful Experience (43)
Breastfeeding in public	SUCCESSFUL: Advice received	UNSUCCESSFUL: Advice received
Blaming self	SUCCESSFUL: Baby factors	UNSUCCESSFUL: Baby factors
Commitment	SUCCESSFUL: Baby temperament	UNSUCCESSFUL: Baby temperament
Community attitude to breastfeeding	SUCCESSFUL: Breastfeeding techniques	UNSUCCESSFUL: Breastfeeding techniques
Comparing experiences	SUCCESSFUL: Birth/hospital experience	UNSUCCESSFUL: Birth/hospital experience
Deciding to breastfeed (1st baby)	SUCCESSFUL: Bottles/formula	UNSUCCESSFUL: Bottles/Formula
Deciding to try again	SUCCESSFUL: Community referrals	UNSUCCESSFUL: Community referrals
Depression	SUCCESSFUL: Confidence	UNSUCCESSFUL: Confidence
Doing the best for your kids	SUCCESSFUL: Coping	UNSUCCESSFUL: Coping
Doing things differently	SUCCESSFUL: Crying	UNSUCCESSFUL: Crying
Giving back by helping others	SUCCESSFUL: Defining	UNSUCCESSFUL: Defining
If I'd known then	SUCCESSFUL: Determination	UNSUCCESSFUL: Determination
Reasons to breastfeed	SUCCESSFUL: Embarrassment	UNSUCCESSFUL: Embarrassment
Resources	SUCCESSFUL: Employment	UNSUCCESSFUL: Employment
	SUCCESSFUL: Enjoyment/satisfaction	UNSUCCESSFUL: Enjoyment/Satisfaction
	SUCCESSFUL: Expectations	UNSUCCESSFUL: Expectations
	SUCCESSFUL: Experience	UNSUCCESSFUL: Experience
	SUCCESSFUL: Feeding frequency	UNSUCCESSFUL: Feeding frequency
	SUCCESSFUL: Feelings	UNSUCCESSFUL: Feelings
	SUCCESSFUL: Getting help	UNSUCCESSFUL: Getting help
	SUCCESSFUL: Getting started	UNSUCCESSFUL: Getting started
	SUCCESSFUL: Knowledge/information	UNSUCCESSFUL: Knowledge/Information
	SUCCESSFUL: Making it work	UNSUCCESSFUL: Making it work
	SUCCESSFUL: Milk supply/milk	UNSUCCESSFUL: Milk supply/milk
	SUCCESSFUL: Pain	UNSUCCESSFUL: Other women can

Codes: Non-Specific to an Experience (15)	Codes: Successful Experience (40)	Codes: Unsuccessful Experience (43)
	SUCCESSFUL: Physical problems (mother)	UNSUCCESSFUL: Pain
	SUCCESSFUL: Pregnancy	UNSUCCESSFUL: Physical problems mother
	SUCCESSFUL: Preparing	UNSUCCESSFUL: Pregnancy
	SUCCESSFUL: Problems	UNSUCCESSFUL: Preparing
	SUCCESSFUL: Rest	UNSUCCESSFUL: Problems start
	SUCCESSFUL: Stopping	UNSUCCESSFUL: Regrets
	SUCCESSFUL: Strategies	UNSUCCESSFUL: Rest
	SUCCESSFUL: Stress	UNSUCCESSFUL: Sorting out what happened
	SUCCESSFUL: Support (Community)	UNSUCCESSFUL: Stopping
	SUCCESSFUL: Support (Family)	UNSUCCESSFUL: Strategies
	SUCCESSFUL: Support (Friends)	UNSUCCESSFUL: Stress
	SUCCESSFUL: Support (HCPs)	UNSUCCESSFUL: Support (Community)
	SUCCESSFUL: Support (Reaching out)	UNSUCCESSFUL: Support (Family)
	SUCCESSFUL: Telling others about breastfeeding	UNSUCCESSFUL: Support (Friends)
	SUCCESSFUL: Weight	UNSUCCESSFUL: Support (HCPs)
		UNSUCCESSFUL: Support (Reaching out)
		UNSUCCESSFUL: Telling others about breastfeeding
		UNSUCCESSFUL: Weight